Lessons Learned

Hazwoper-on-the-Web

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

- Accuracy
- Clarity
  - Logical
  - Contextual
- On Task Delivery
  - No distractions
  - Technology that works
- Engagement
  - Multi sensual
  - Responsive to questions
  - Interaction with others
- Variety
  - Multi-media

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Hazwoper 40-hr

Home ▸ Course Content ▸ Lesson 3 - Hazard Recognition

ACTION MENU: Previous Next Contents Retrace Refresh Glossary | Take Notes | Search | Discussions | Mail

Lesson 3 - Hazard Recognition

Audio *Click the speaker once to start audio; click once to stop audio. Please allow time for audio to load.*

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 protective equipment to protect themselves and the surrounding population.

Knowledge Objectives

Audio

Course Content: Page 11/70 Internet

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Lesson 3 - Hazard Recognition

Lesson 3 deals with hazard recognition.

What is a hazard? What are risks? What makes certain situations hazardous or certain conditions hazardous? Can we determine the risks 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 modify those conditions to lessen

Search | Discussions | Mail

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Knowledge Objectives

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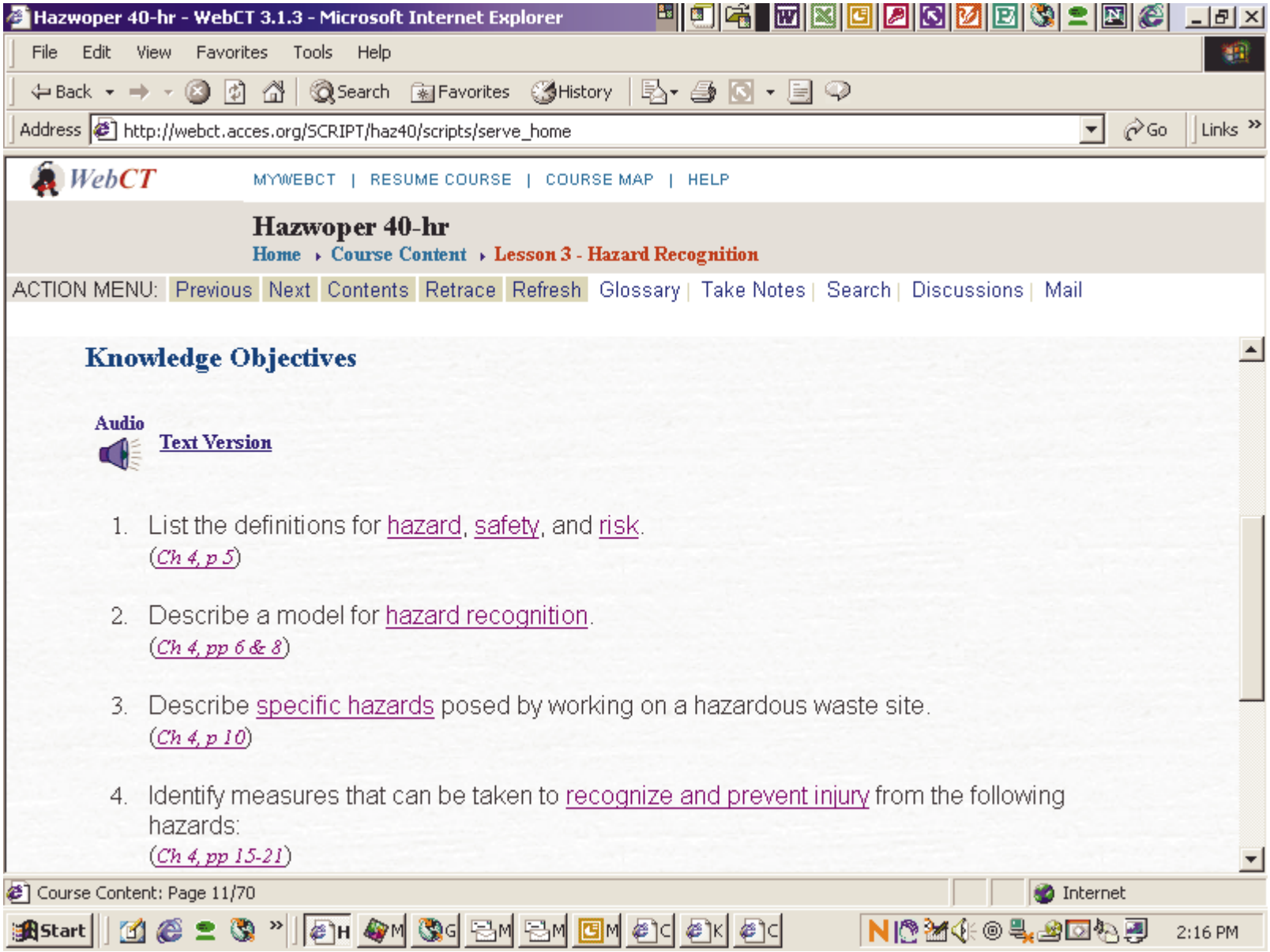
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Hazwoper 40-hr
Home ▸ Course Content ▸ Lesson 3 - Hazard Recognition
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2. Describe a model for hazard recognition. (Ch 4, pp 6 & 8)
3. Describe specific hazards posed by working on a hazardous waste site. (Ch 4, p 10)
4. Identify measures that can be taken to recognize and prevent injury from the following hazards: (Ch 4, pp 15-21)
Course Content: Page 11/70
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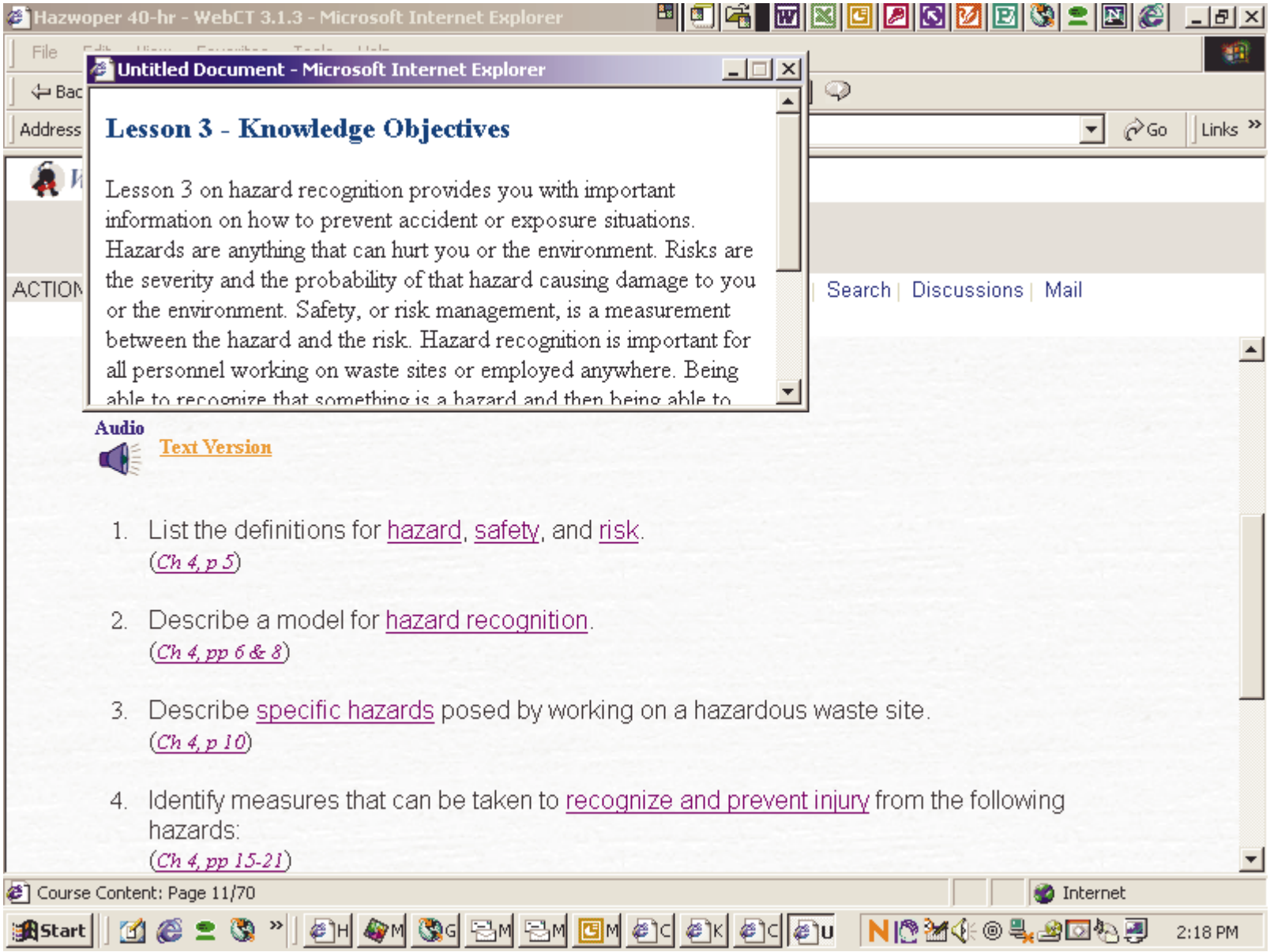
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Lesson 3 - Knowledge Objectives
Lesson 3 on hazard recognition provides you with important information on how to prevent accident or exposure situations. Hazards are anything that can hurt you or the environment. Risks are the severity and the probability of that hazard causing damage to you or the environment. Safety, or risk management, is a measurement between the hazard and the risk. Hazard recognition is important for all personnel working on waste sites or employed anywhere. Being
Search | Discussions | Mail
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Course Content: Page 11/70
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Close Back Forward

DEFINING HAZARD, RISK, AND SAFETY

The whole purpose for identifying hazards at a waste site is to keep the worker safe while on the job. A common definition of safety is "freedom from danger or harm." In reality, nothing is completely safe, but we can always make a situation safer by being aware of the hazards involved and taking steps to protect workers.

SLIDE

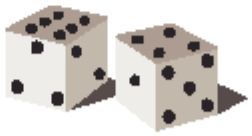
HAZARD

Hazard is defined as any substance, situation, or condition that is capable of harming human health, property, or the environment. A hazard represents a **potential** for harm. A potential hazard, however, does NOT indicate how serious the harm might be or how likely it may be for harm to occur. For example, a direct hit by a meteorite is a potential hazard of life on earth. This says nothing about the seriousness or the likelihood of harm.

SLIDE

RISK

Risk is defined as a measure of the probability and severity of a hazard to harm human health, property, or the environment. Risk is a measure of how likely harm is to occur and an indication of how serious the harm might be if it does. The severity of a direct hit on you by a meteorite is quite great but the probability of this happening is very low. Thus the risk is very low.



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SAFETY

Safety may be defined as a judgment of the acceptability of risk. That is, once we have identified a hazard and estimated how risky it is, we make a judgment about

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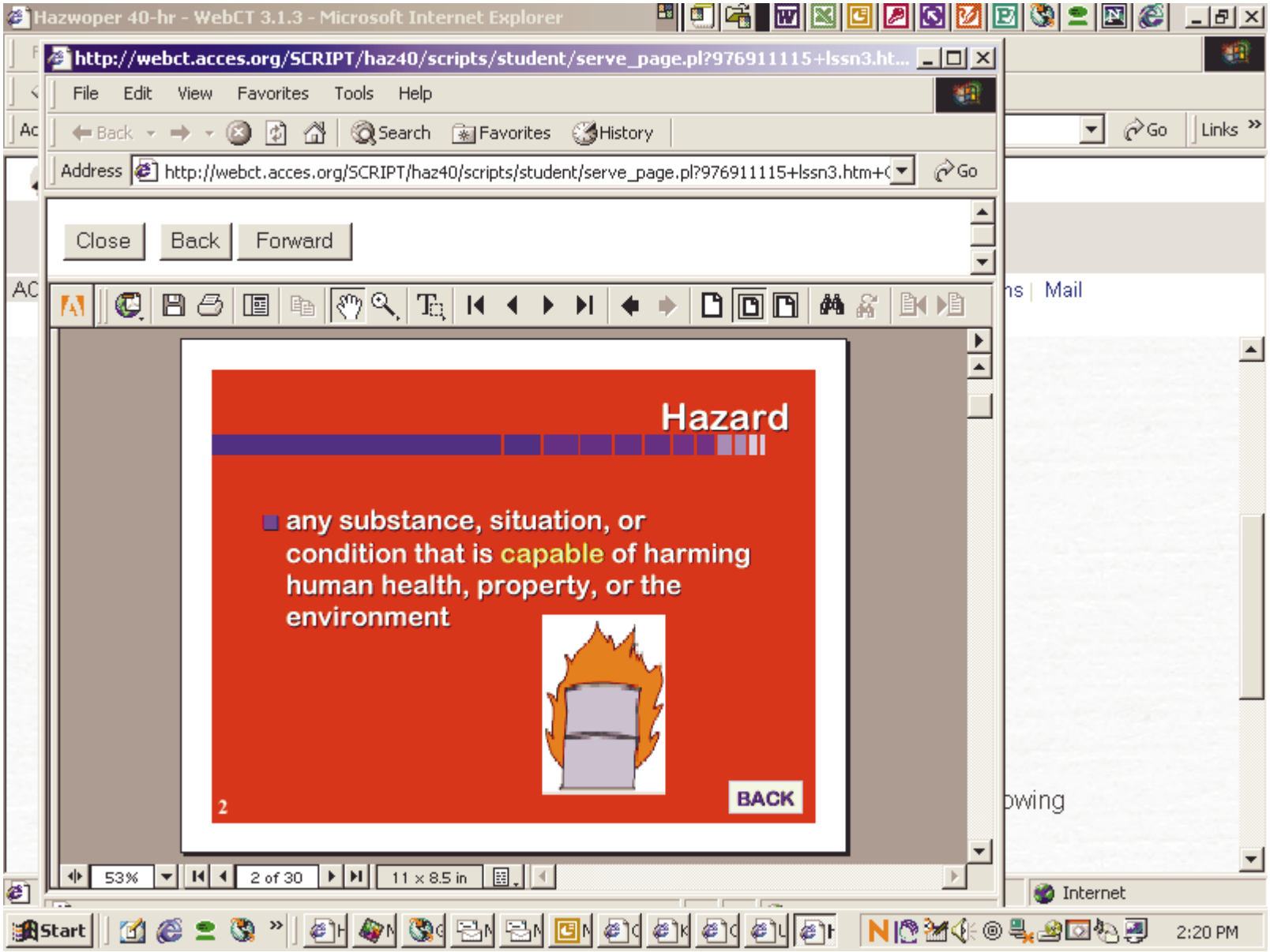
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Close
Back
Forward
Hazard
any substance, situation, or condition that is capable of harming human health, property, or the environment
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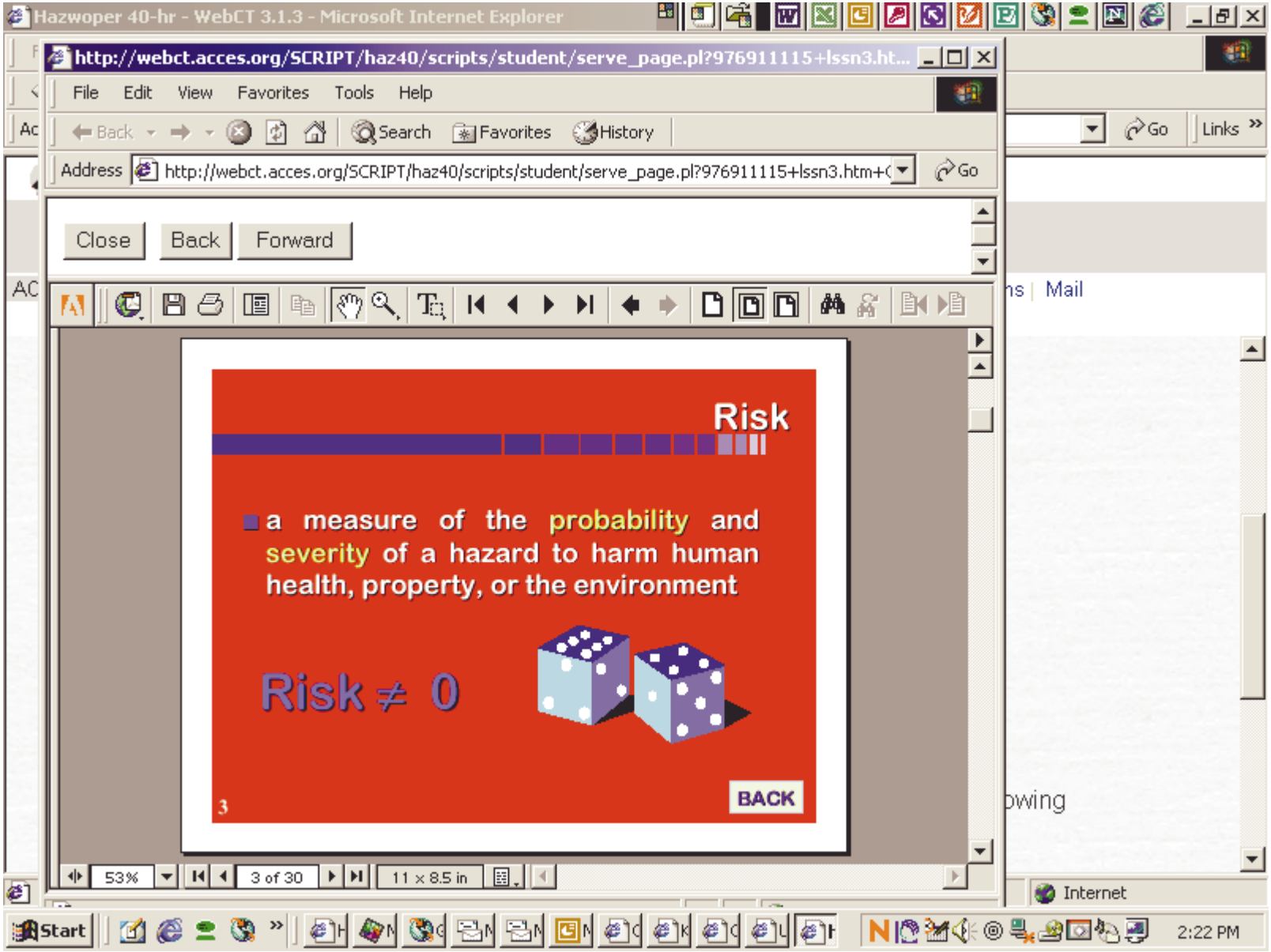
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Risk
a measure of the probability and severity of a hazard to harm human health, property, or the environment
Risk ≠ 0
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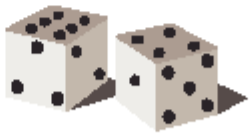

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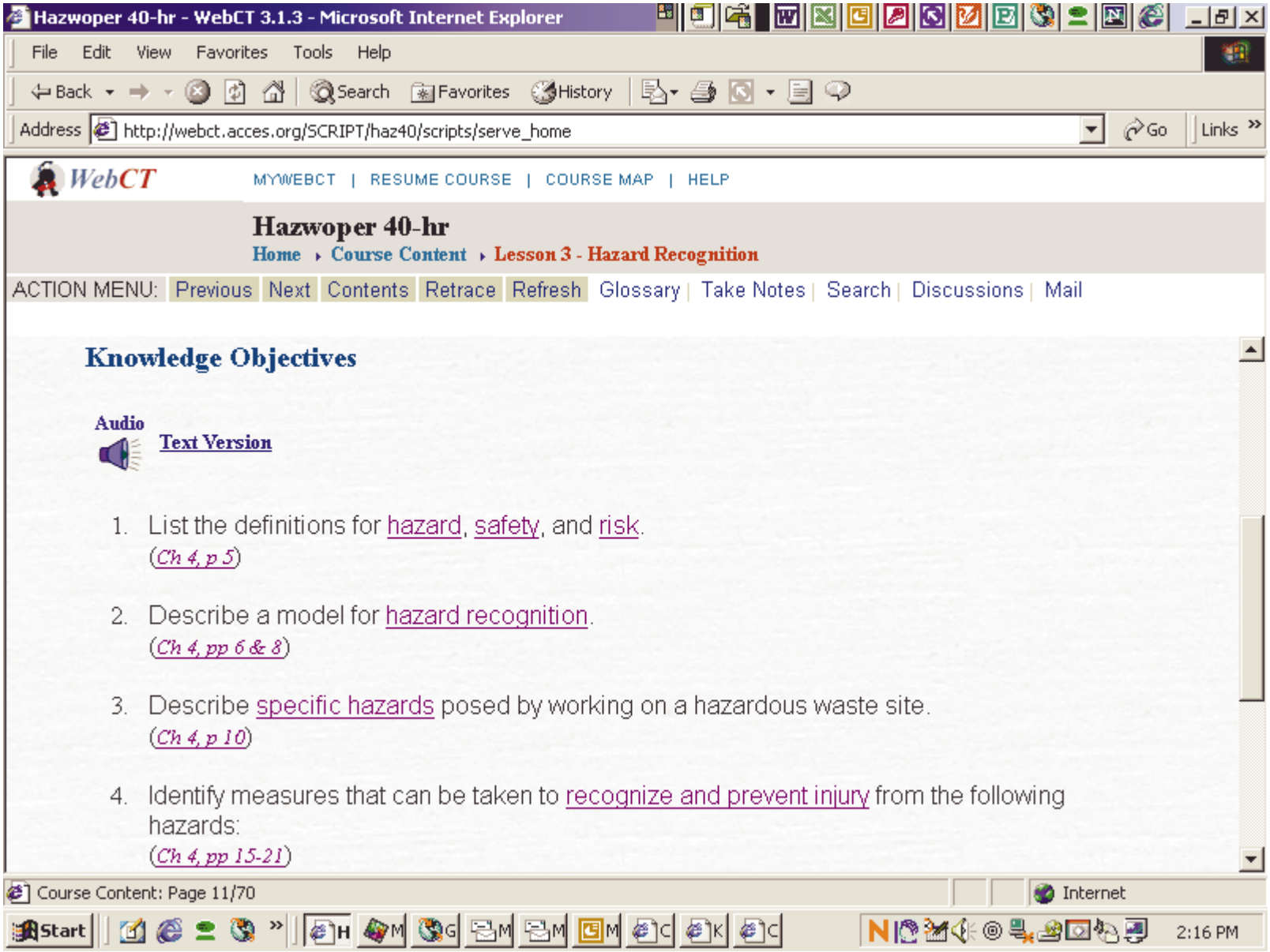
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Internet
Start
2:16 PM

Audio

- Needed for **Multi sensual Engagement of Students**
- **Needs (helps) to be Professional Audio**

Hands-On

- Needed More
- Needed Modeling
- Needed Guidance

Technology

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

SCORM™

SCORM (Sharable Content Object Reference Model)

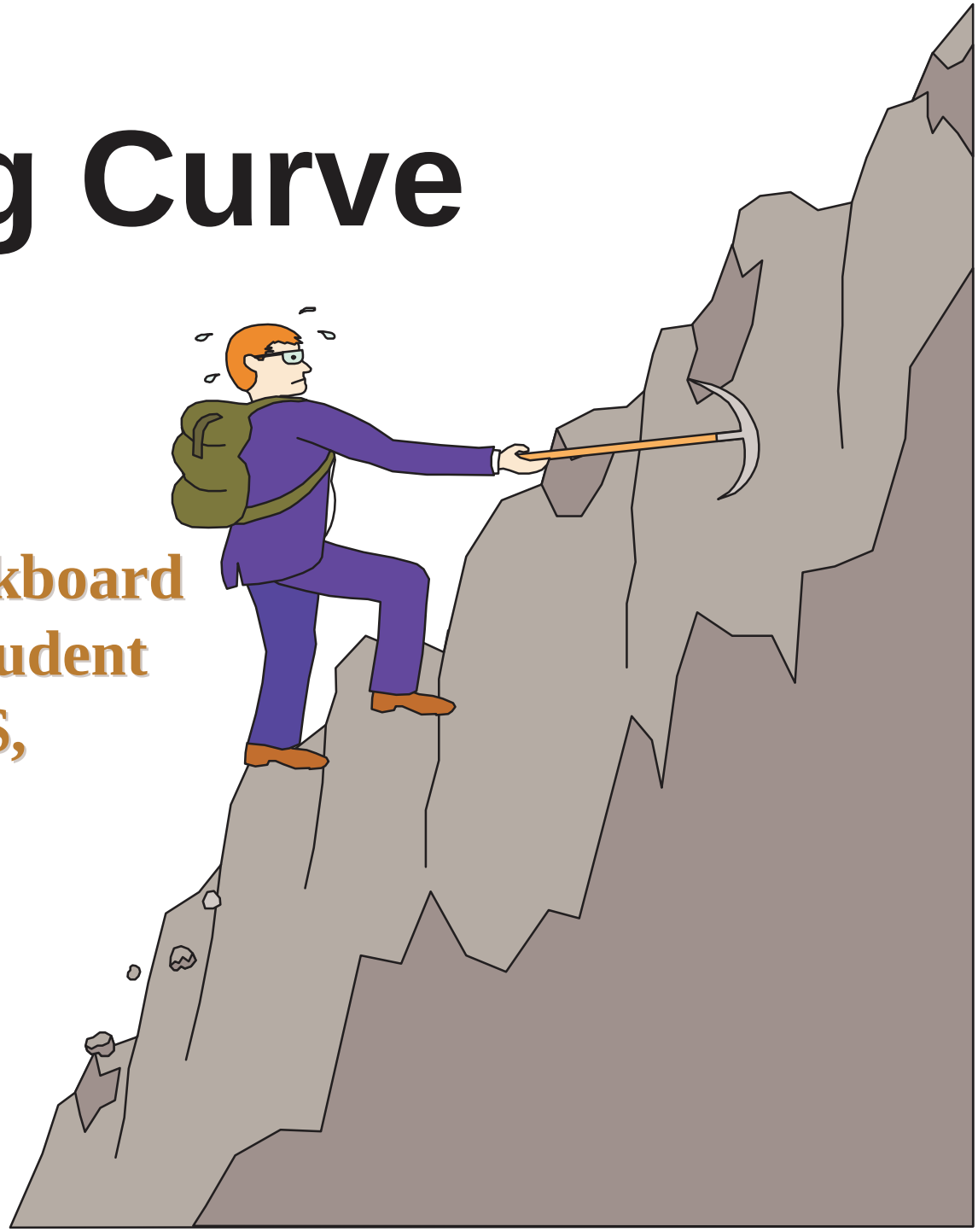
- A reference model that defines a Web-based learning "content model"
- A set of interrelated technical specifications designed to meet the Department of Defense's high level "-ilities"
- A process to knit together disparate groups and interests
- A bridge from general emerging technologies to commercial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

SCORM™

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

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



WEB CT

The developer must know HTML computer 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)

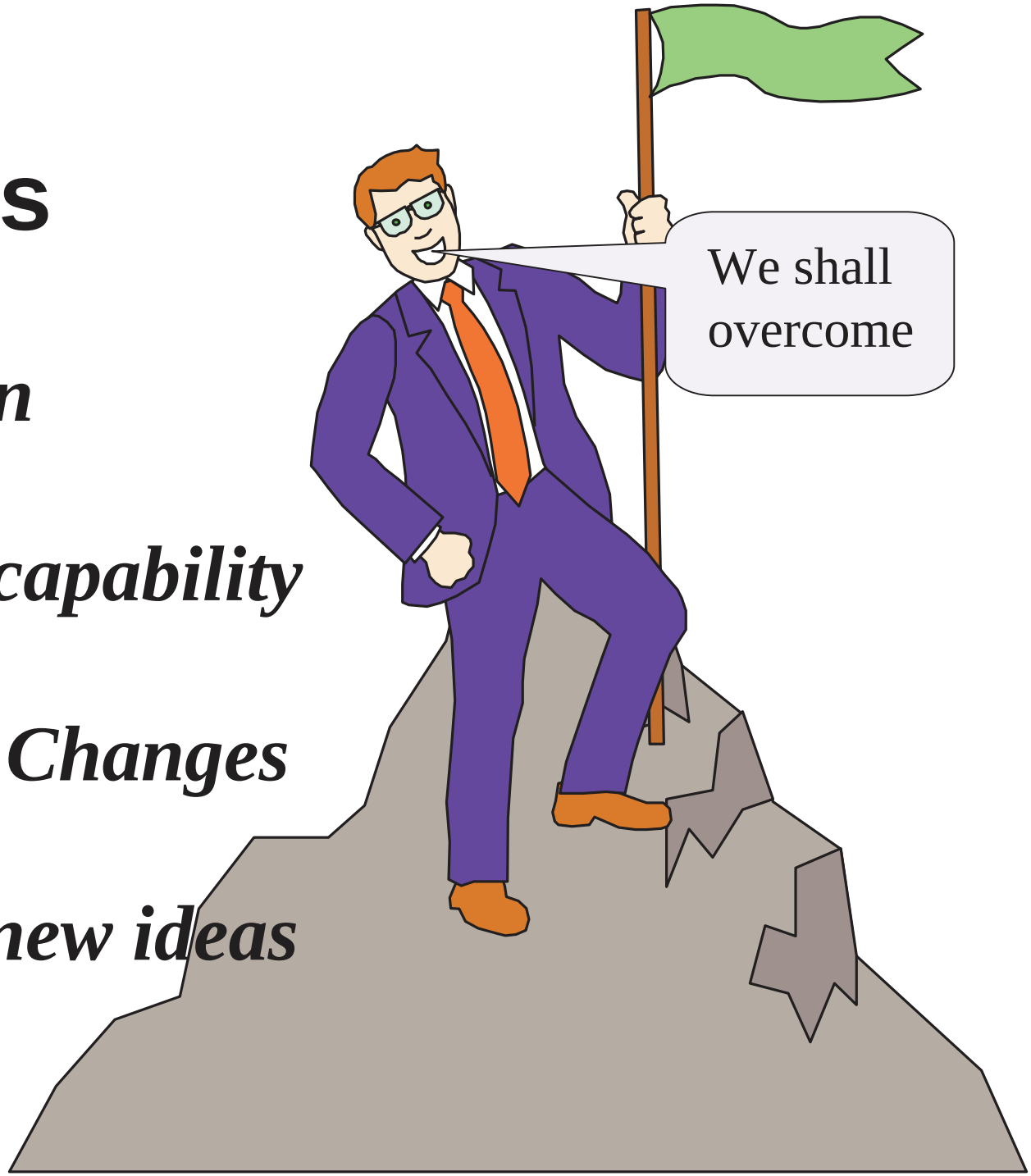
Obstacles

Organization

Software Incapability

Technology Changes

The Boss's new ideas



Learner/User Involvement

- 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

Getting through the maze

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.