Building Quality into E-Learning: Four Methods for Quality Assurance

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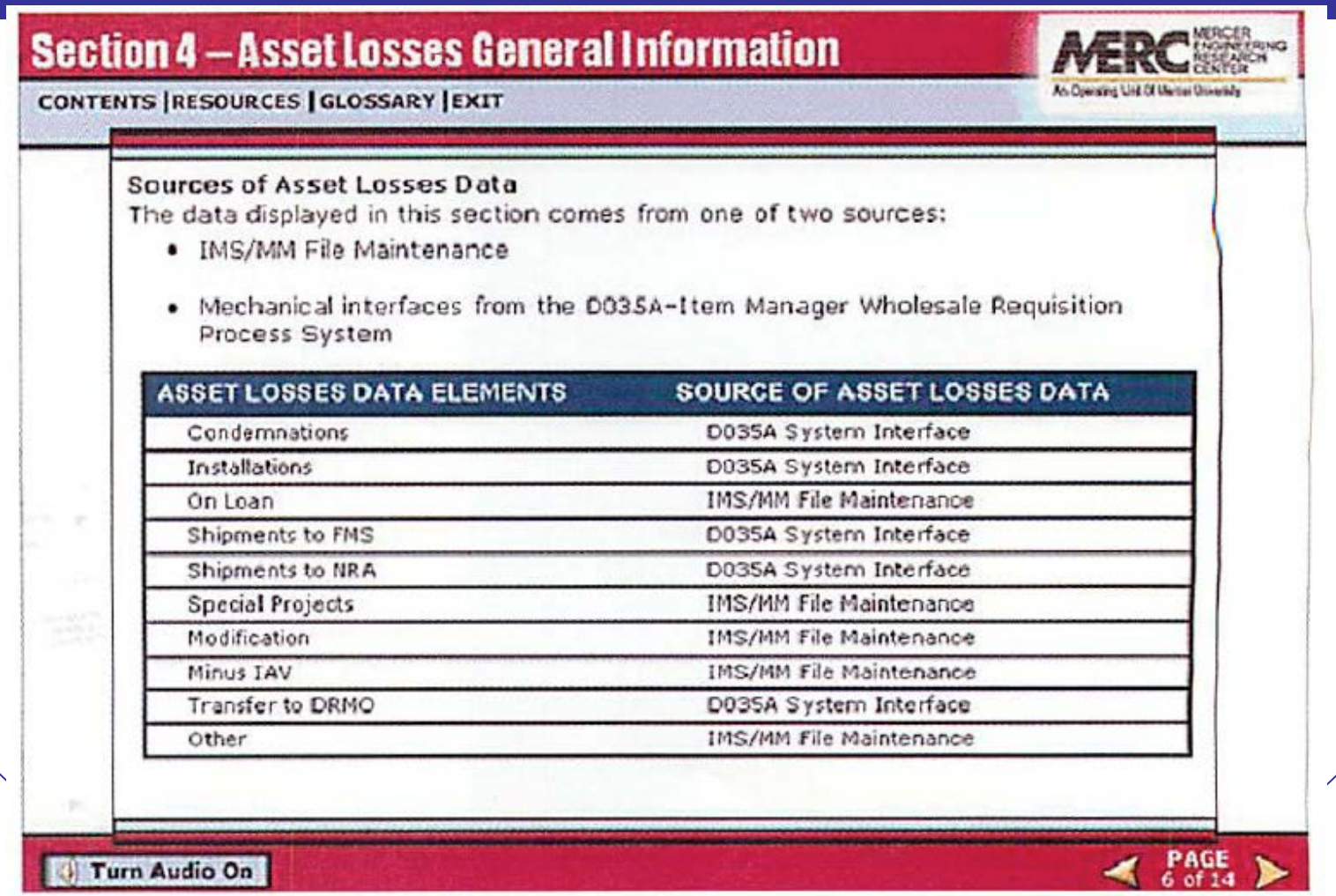
Quality?

Presentation Overview

- Introduction
- Step One: Create a QA Plan
- Step Two: Focus on Instructional Design
- Step Three: Apply Specific Criteria
- Step Four: Reduce Costs & Barriers to QA
- Conclusion

Quality – is Hard…

Quality is Hard



Section 4 – Asset Losses General Information

MERC Mercer Engineering Research Center
An Operating Unit Of Marion University

CONTENTS | RESOURCES | GLOSSARY | EXIT

Sources of Asset Losses Data

The data displayed in this section comes from one of two sources:

- IMS/MM File Maintenance
- Mechanical interfaces from the D035A-Item Manager Wholesale Requisition Process System

ASSET LOSSES DATA ELEMENTS	SOURCE OF ASSET LOSSES DATA
Condemnations	D035A System Interface
Installations	D035A System Interface
On Loan	IMS/MM File Maintenance
Shipments to FMS	D035A System Interface
Shipments to NRA	D035A System Interface
Special Projects	IMS/MM File Maintenance
Modification	IMS/MM File Maintenance
Minus IAV	IMS/MM File Maintenance
Transfer to DRMO	D035A System Interface
Other	IMS/MM File Maintenance

Turn Audio On

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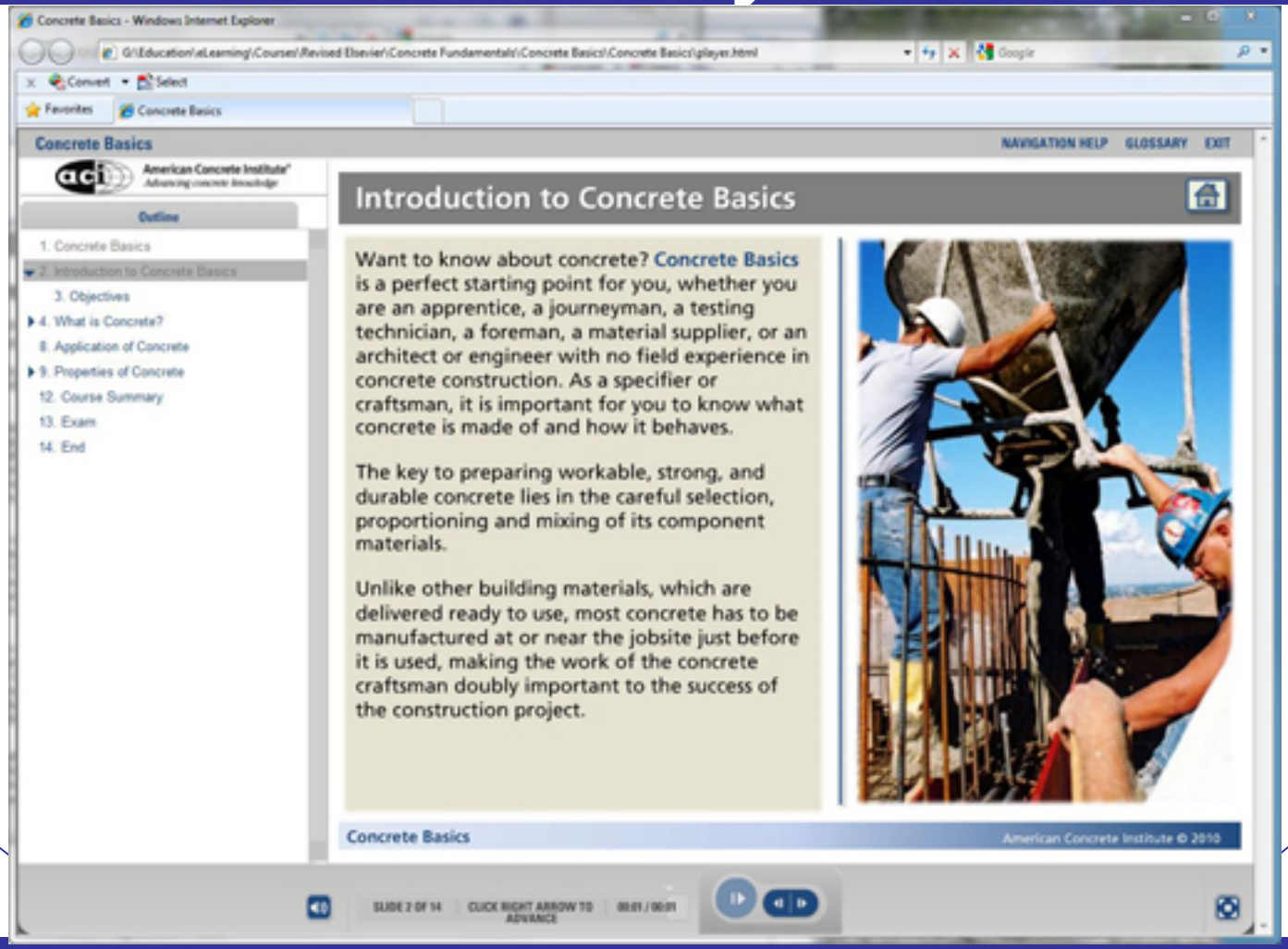
Quality Means Different Things

Quality means more than "Pretty"



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Step 1: Create a Specific Plan

- Generate and write down a plan specific to your purpose and audience
- Your plan will define the QA process, not just “what is” quality

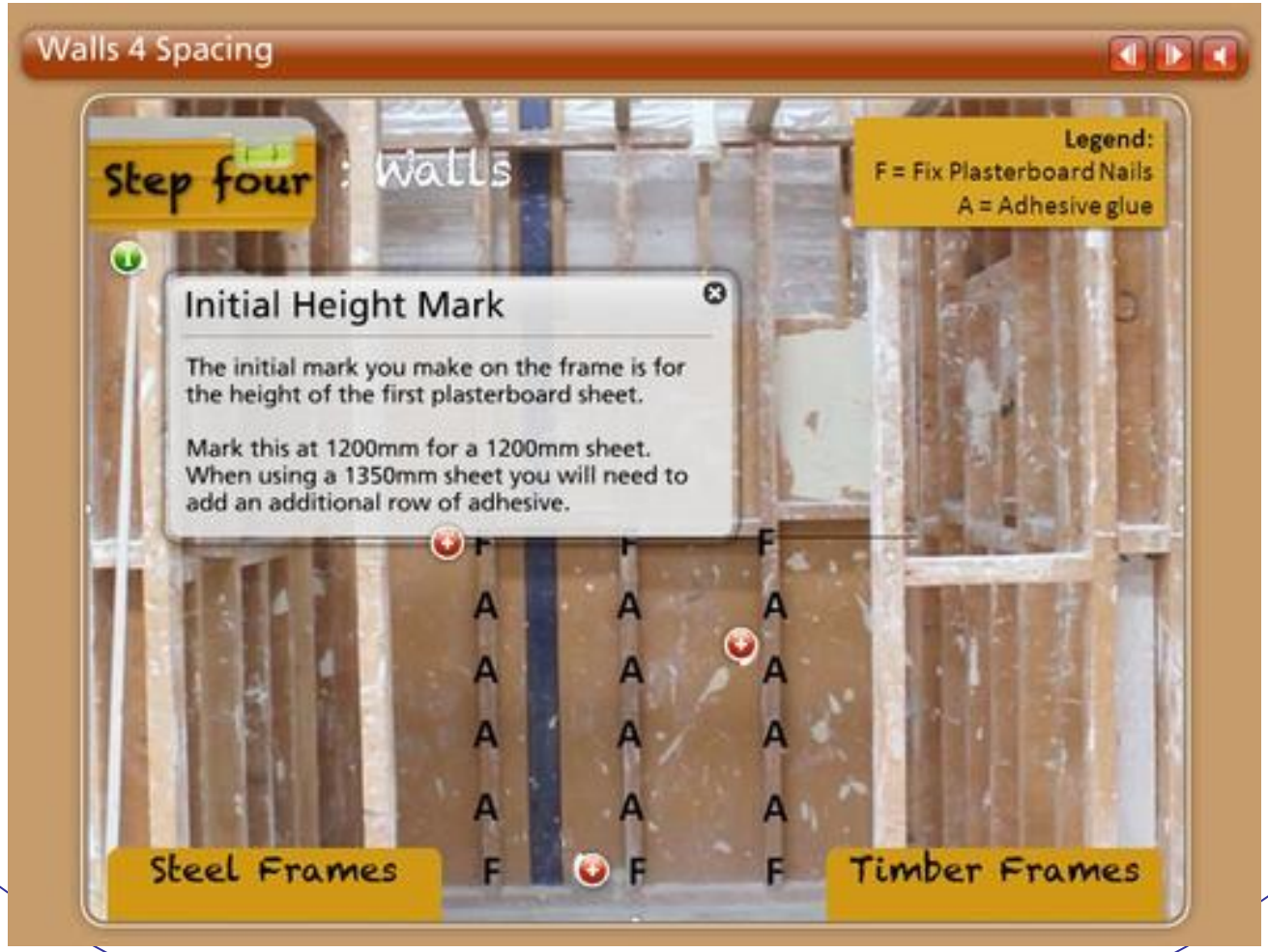
Step 1: Create a Specific Plan

- Your plan should include:
  - Requirements for instructional quality
  - Clear instructional design process
  - Specific documentation plans

Step 1: Create a Specific Plan

- Documents to include in your QA plan:
  - Requirements specification
  - Style guide
  - Master design blueprint
  - Review & audit schedule
  - Defect & revision reports
  - Verification & validation reports

Step 1: Create a Specific Plan



Step 1: Create a Specific Plan

- Without a specific QA plan, projects can develop “scope creep”, increasing schedules and expenses

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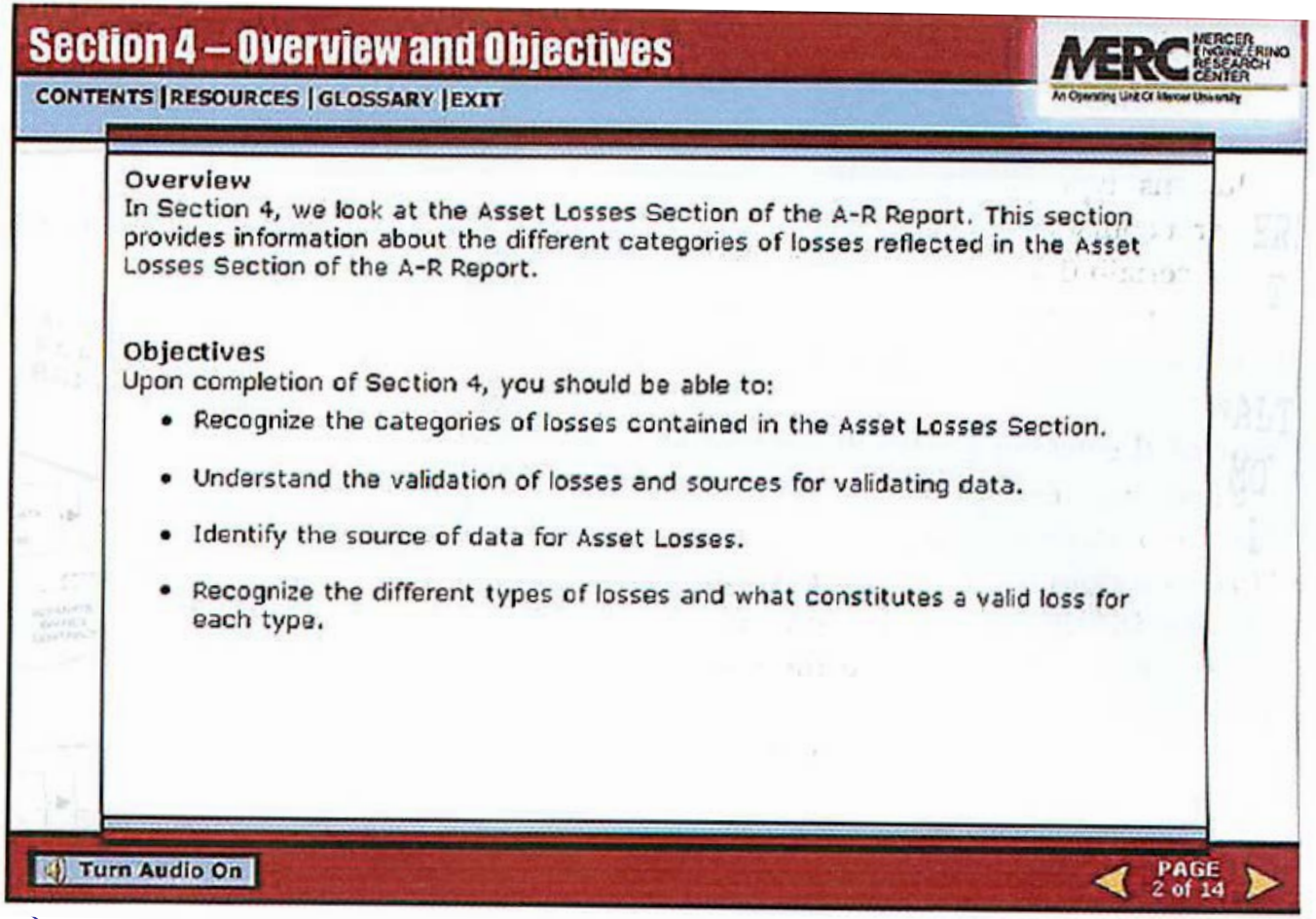
Step 2: Strong Instructional Design

- Good instructional design is like scaffolding; it provides structure and conformity

Step 2: Strong Instructional Design

- Good instructional design helps QA by:
  - Matching the training to user needs
  - Creating measurable objectives
  - Matching assessment to objectives
  - Creating appropriate instructional strategies
  - Contributing to a well-designed interface

Step 2: Strong Instructional Design



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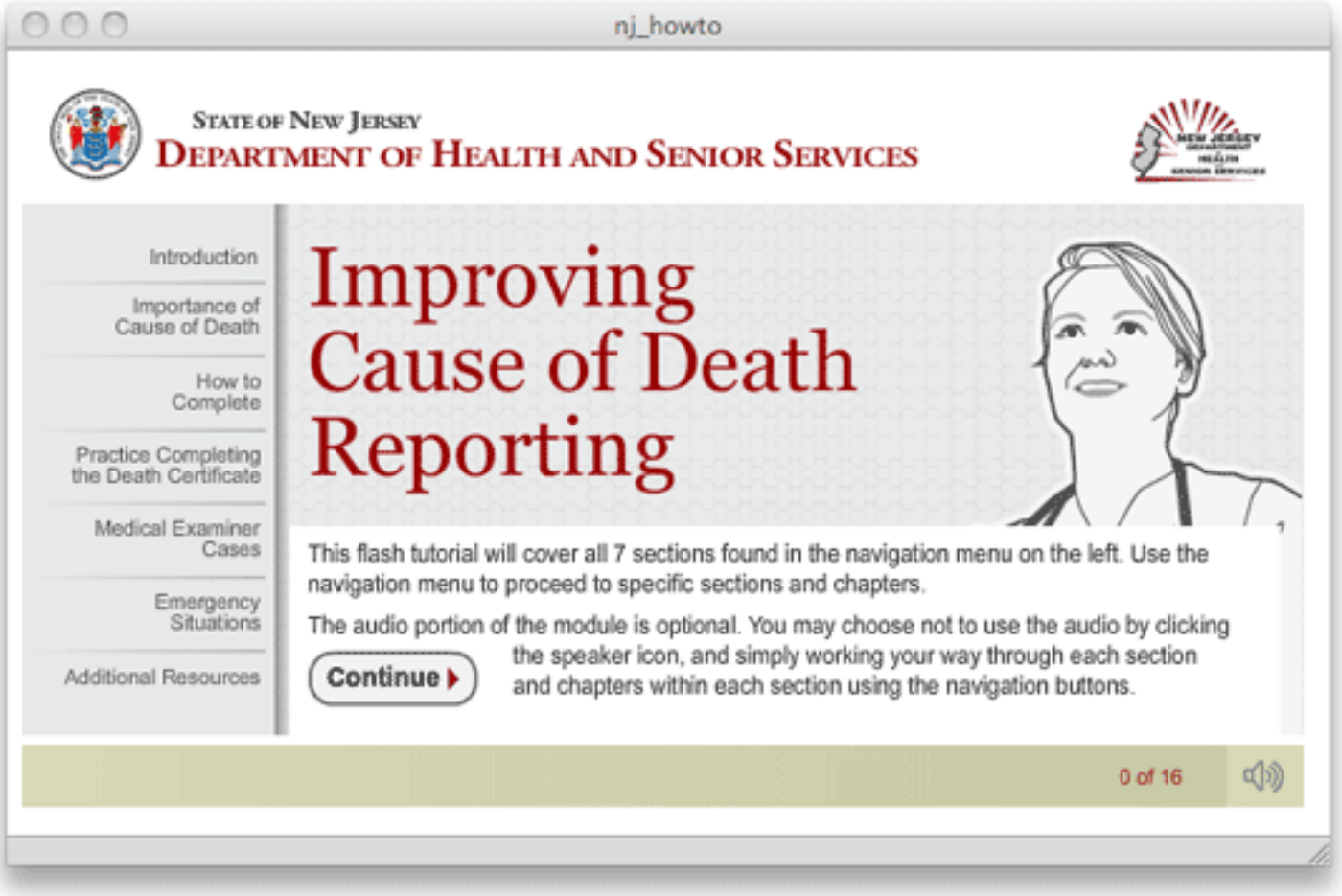
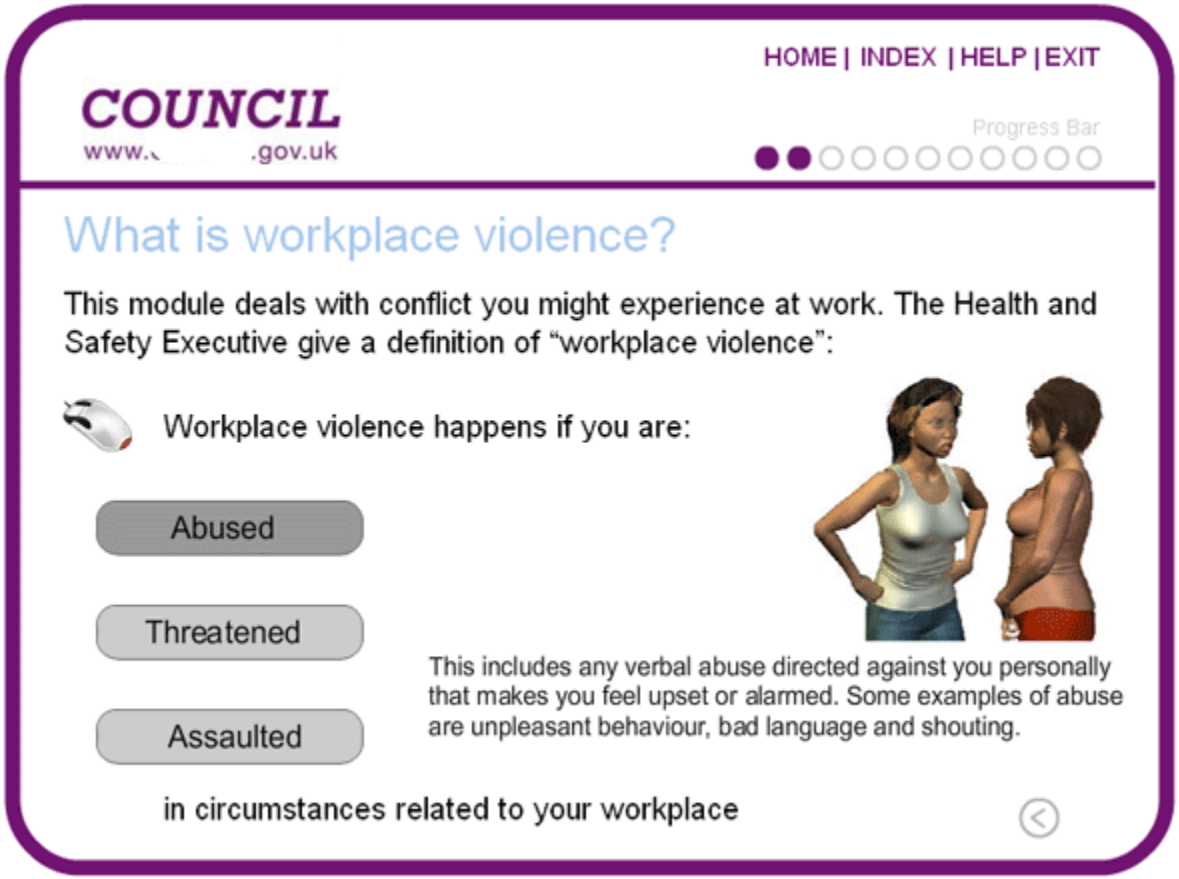
Step 3: Create Specific Criteria

- Content
- Aesthetics & tone
- Media

Step 3: Create Specific Criteria



Step 3: Create Specific Criteria



Step 3: Create Specific Criteria

Step 3: Create Specific Criteria

Blog

A checklist for quality e-learning instructional design
By Alison Bickford on August 13, 2011

There is a methodology to creating e-learning courseware that is instructionally sound. The correct methodology is absolutely dependent upon the content being delivered. There is a useful article on this topic in July's **T&D Magazine**.

There is also a 'hygiene factor' to e-learning quality. The value of ensuring quality navigation, visual design, text layout etc is to reduce the cognitive burden of a learner trying to uncover what the course means and what they are expected to do. You want to ensure the learner's thinking effort is focused on the content and not distracted by incongruent design.

You may like to use this checklist next time you are creating an e-learning course:

1. **The interface is visually organised and easy to use.**
   Be sure to keep the navigation to the minimum, and use a layout that has some commonality to the interfaces that your audience is use to e.g. exit and resources tab.
2. **The direction the learner is expected to take is clear. Options are available for exploration.**
   The navigation of the course should enable the self-directed adult to explore, but the navigation needs to be clear enough for them to return to the body of the course at any point. The more simple the navigation, the more likely the learner will feel confident to explore.

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Step 4: Reduce Costs & Barriers

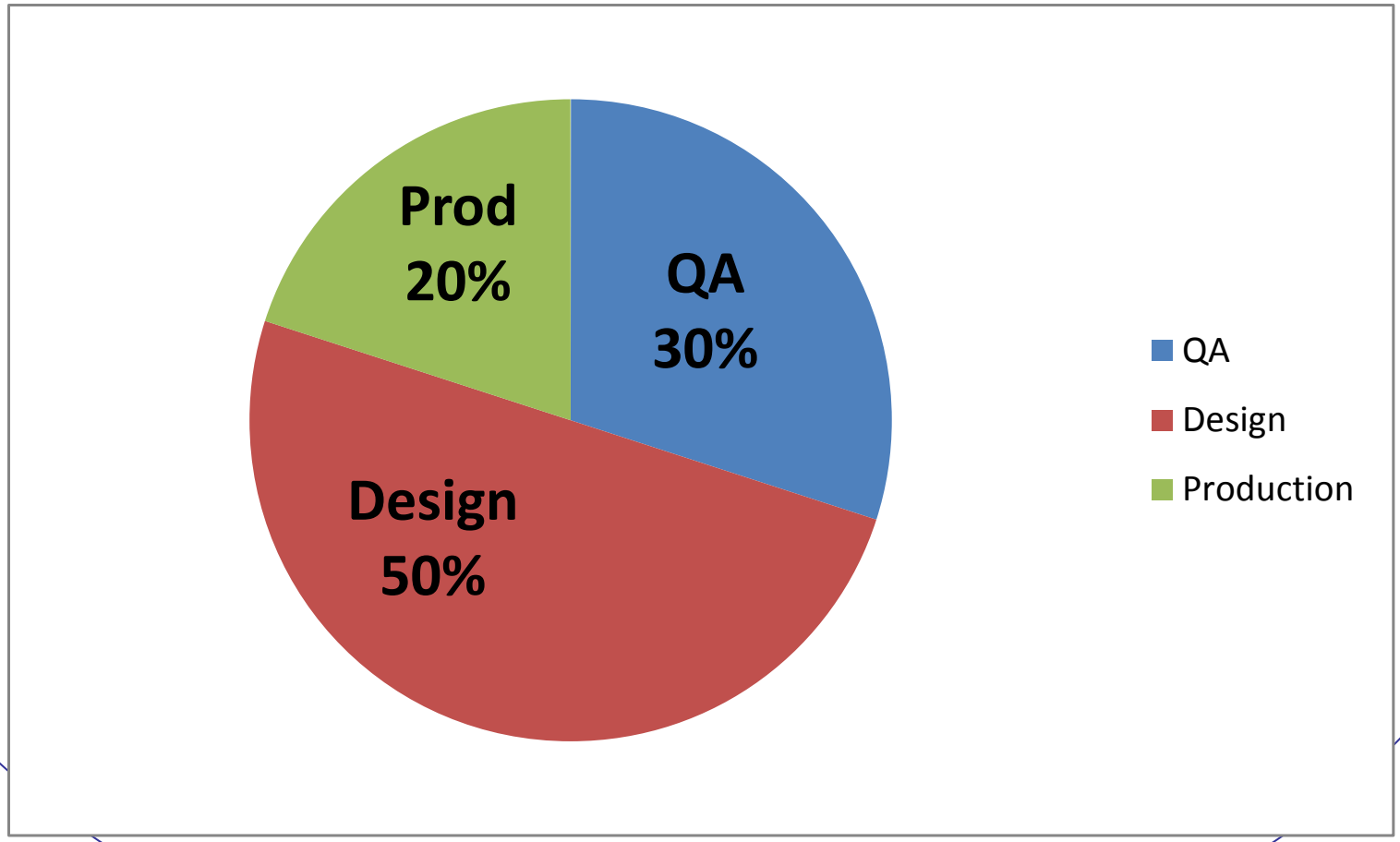
- Two major barriers to QA:
  - Cost
  - Organizational structure

Step 4: Reduce Costs & Barriers

If the quality assurance tasks cost one amount, but the result of performing that task saves another amount, the real cost is the difference between the two, not the initial cost of the activity.

Schulmeyer & McManus, Handbook of Software Quality Assurance

Step 4: Reduce Costs & Barriers



Step 4: Reduce Costs & Barriers

- Use these steps to estimate QA costs:
  - Itemize all QA activities
  - Determine customer requirements
  - Estimate deliverables
  - Determine QA level of effort
  - If QA is less than 30% of total cost, consider recalculating

Step 4: Reduce Costs & Barriers

- Organizational structure as a barrier:
  - QA should be independent of design & production
  - If QA is within design & production, its authority will erode
  - QA should be a separate role

Conclusion

1. Create a QA plan
2. Build in sound instructional design
3. Apply specific criteria to measure quality
4. Target costs & eliminate barriers

Thank you!
Questions or discussion?

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