SPM4332: CD-ROM BASED MULTIMEDIA DEVELOPMENT

MULTIMEDIA COURSEWARE: EVALUATION

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What to Evaluate?

• What to evaluate?
  – The usability of the system
• ... it depends on the stage of a project
  – Ideas and concepts
  – Designs
  – Prototypes
  – Implementations
  – Products in use
• ... it also depends on the goals
Why Evaluate?

• Why we need to evaluate multimedia courseware?
• Ensure functionality (effectiveness)
  – Assess (proof) that a certain task can be performed
• Ensure performance (efficiency)
  – Assess (proof) that a certain task can be performed given specific limitations (e.g. time, resources)
• Customer / User acceptance
  – What is the effect on the user?
  – Are the expectations met?
Why Evaluate?

- Identify problems
  - For specific tasks
  - For specific users
- Improve development life-cycle
- Secure the investment (don’t develop a product that can only be used by fraction of the target group – or not at all!)

- Evaluating multimedia courseware means determining whether or not they are “good”.
Why Evaluate?

- Confirmation of Decisions
- Lesson Improvement

“Evaluation is basically an ongoing process used to determine whether lesson objectives have been met, identify reasons for the observed performance, and identify areas of modification.”
Levels of Courseware Evaluation

• Levels of Courseware Evaluation
  – Formative Evaluation & Summative Evaluation

• Evaluation Techniques
  – Formal & Informal
Evaluation Techniques

• Formal
  – Planned evaluation models
  – Formal analysis
  – Attitudinal questionnaires
  – Data collection and collation
  – Formal tabulation
  – Empirical evidence
Evaluation Techniques

• Informal
  – Advice from experts
  – Ideas from users
  – Observations
  – Interviews
  – Simplistic
  – Anecdotal data
    (Based on casual observations or indications rather than rigorous or scientific analysis)
Levels of Courseware Evaluation

• Formative Evaluation
  – Identification of lesson features that need modification
  – Ongoing process
  – Lesson improvement is the goal
Levels of Courseware Evaluation

• Summative Evaluation
  – Signature authority
  – Not used for modification
  – Used for purchase or adoption decisions
Courseware Evaluation Tools

• What are the tools??

• Observation, interviews (Structured/Non Structured)

• Surveys, Focus Groups, Analysis, Reports, and Dialogue with Users

• Form, Checklist or Rubric
Types of Evaluation

• **1. One-to-One:**
  – Initial lesson design and development.
  – Informal procedures.
  – Identify potential problems.

• **Assets of One-to-One Evaluations:**
  – Insight gained before coding or implementation.
  – Identification of problems.
  – Expansion of lesson features or redirection.
Types of Evaluation

2. Small-Group Evaluation:
   – Conducted at the lesson’s completion.
   – Determines effectiveness.
   – Collection and interpretation of student performance data.

Assets of Small-Group Evaluations:
   – Use informal techniques & data.
   – Identify areas of improvement.
   – Generalized results from small-group interaction.
Types of Evaluation

• 3. Field Testing:
  – Conducted in actual settings.
  – Occurs when lessons are “final quality”.
  – Conducted to confirm lesson effectiveness.

• Assets of Field Testing:
  – “Real Life” simulations of lesson use.
  – Relies heavily on both formal and informal techniques.
  – Minimal changes can be made.
Thank You!