

## 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.

#### **OPENCOURSEWARE**

# Thank You!

