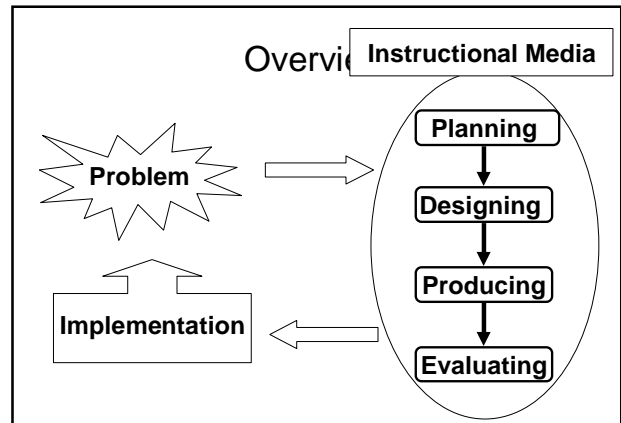


Planning, Designing, Producing and Evaluating Instructional Media

Workshop in USP
Maekawa Tomoyasu
21to24, Mar 2005



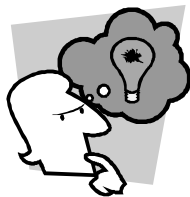
Contents

- Idea/Purpose
- Audience Analysis
- Objectives
- Research, Media and Budget
- Production
- Evaluation

Idea/Purpose

Starting Point

- Problem
- Interview / Questionnaire



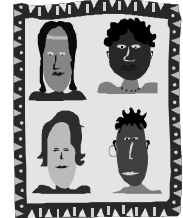
Audience's Needs

- Information / Knowledge
- Skills
- Desired Attitude

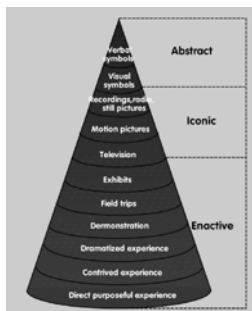
Audience Analysis

Characteristics

- Age
- Educational Level
- Job / Title
- Cultural Background
- Geographic Location



Dale's Cone of Experience



Visual Symbol

Pictorial symbols		Graphic symbols		Verbal symbols	
				a wagon with a bowed top supported by bowed strips of wood or metal	covered wagon
photograph	illustration/drawing	concept-related graphic	stylized or arbitrary graphic	verbal description	noun/label
← realistic			abstract →		

Heinich, R., Molenda, M., and Russel, J. D., Samaldino, S. E., "Instructional Media and Technologies for Learning 7th Ed." Merrill Prentice Hall

Entry Competency

- Prerequisite knowledge and skills
 - Entry Test
- Target knowledge and skills
 - Pretest

Learning Styles

- Perceptual Preferences and Strength
- Information Processing Habits
- Motivational Factors
- Physiological Factors

Learning Styles

- Perceptual Preferences and Strength
 - Auditory
 - Visual
 - Tactile
 - Kinesthetic

Learning Styles

- Information Processing Habits

	Sequential	Random
Concrete	Workbook, Programmed instruction	Game, Simulation
Abstract	Reading, Listening	Group discussion, Lecture with Q&A

Learning Styles

- Motivational Factors
 - Achievement
 - Social Motivation
 - Competitive
- ARCS model - John M. Keller

Learning Styles

- ARCS model
 - Attention: Is it interesting for me?
 - Relevance: Is it important to me?
 - Confidence: Can I do it, if I try?
 - Satisfaction: Do I want to do it, again?

Learning Styles

- Physiological Factors
 - Gender
 - Health
 - Environment

Size

- Individuals
- Groups
- Large Audience



Objectives

From Purpose to Objectives

- General Idea to:
 - Clear- Cut
 - Specific Statements
- In Behavioral terms

As Specific as Possible

- Students will improve their mathematical skills
- The second-grade students will be able to solve correctly any single-digit addition problem without using calculators

ABCDs of Objectives

- A: Audience
- B: Behavior
- C: Conditions
- D: Degree



Audience

- What the LEARNER does
- Not what the instructor does
- Whose capability is going to be changed ?

Behavior

- New Capability
- Action
- Observable Performance

Conditions

- Allowed or not allowed
 - Tools
 - Equipment

Degree

- Standard or Criterion
 - Accuracy
 - Proficiency
 - Time

Example

- Given necessary cooking tools and 2 eggs (Condition), 5th grade students who can make fried eggs (Audience) will be able to make an omelet (Behavior) that is eatable and in good shape, in 10 minutes (Degree).

Research, Media and Budget

Research

- Facts About a Subject
- Details of a Task
 - Careful study about topics
 - Interviews
 - Visit to suitable facilities
 - Libraries

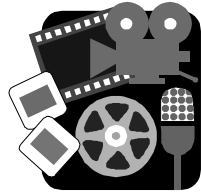
Team Approach

- SME (Subject Matter Expert)
- Instructional Designer
- Technical Staff



Media

- Video
- Printed Material
- Desktop Presentation
- CD-ROM
- WBT, etc



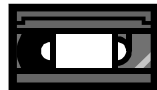
Video

- Manipulation of Time
 - Compression of time
 - Expansion of time
- Manipulation of Space
- Animation



Video

- Motion
- Process
- Risk-free Observation
- Dramatization
- Unfamiliar scene



Printed Material

- Flexibility
- No electricity needed
- Economical



Printed Material

- Reading Level
- Prior Knowledge
- One-Way Presentation

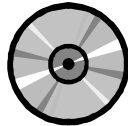


Desktop Presentation

- Can be revised at the last minute
- Linear Structure
- Controlled by Presenter

CD-ROM

- Interactivity
- Easy to Produce
- Relatively Economical
- Require PC



WBT

- Interactivity
- Latest Information or Material
- Internet Access

Obtaining Materials

- Selecting available materials
- Modifying existing materials
- Designing new materials



Specification

- Type of Material
- Type of Media
- Length
- Facilities / Equipment
- Schedule

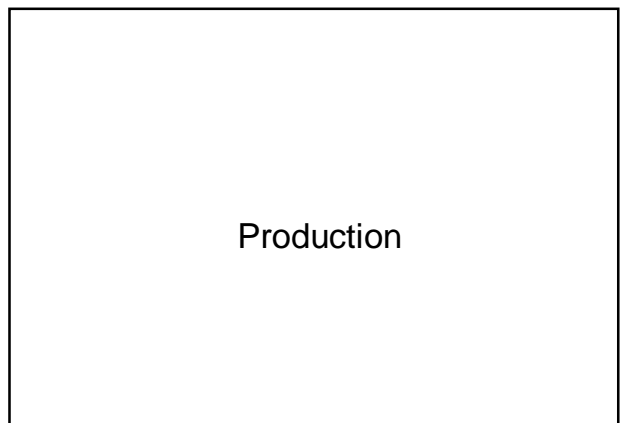
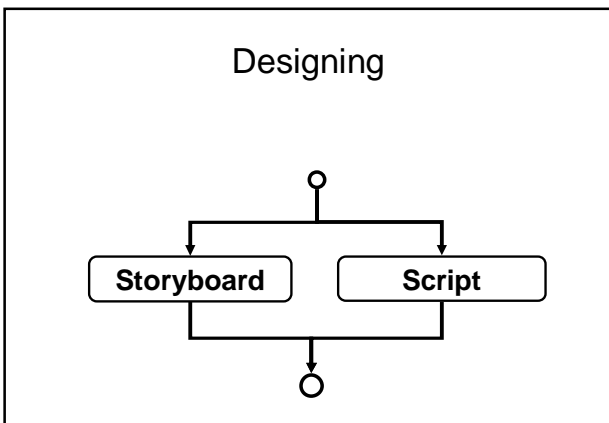
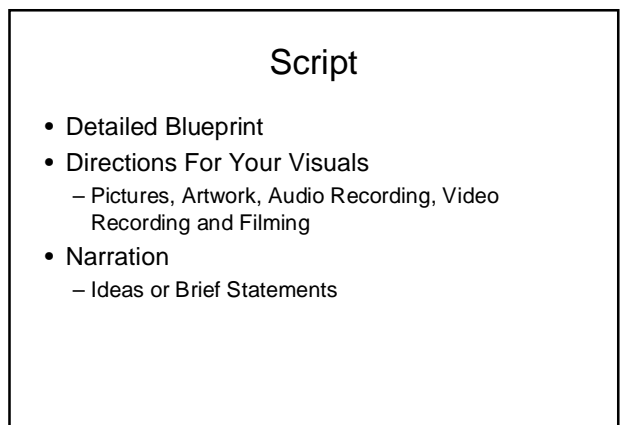
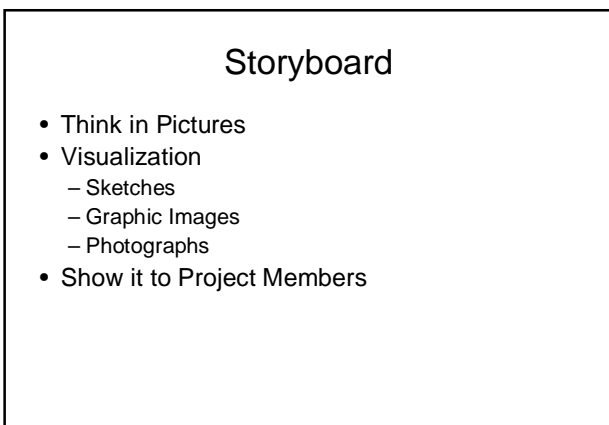
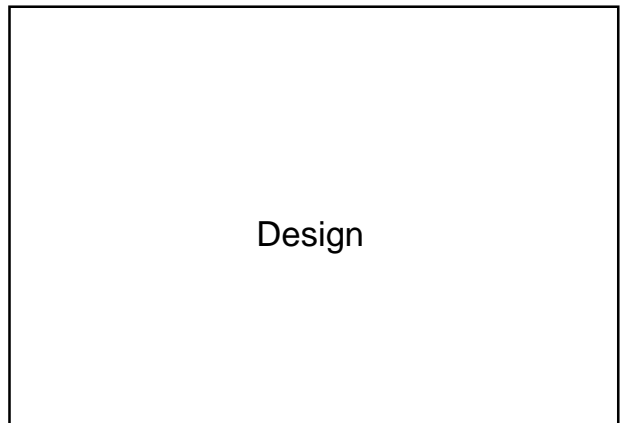
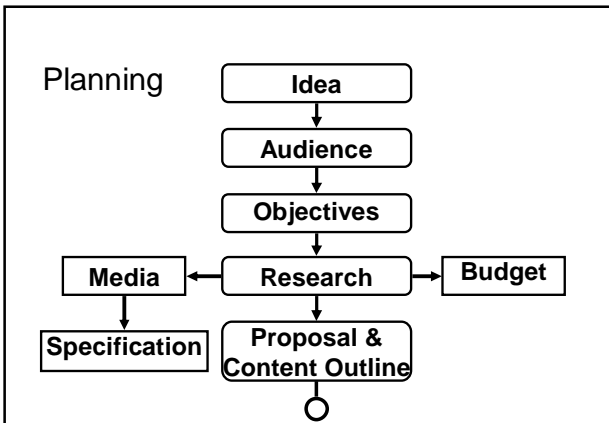
Budget

- Purchase
- Rental
- Service
- Overhead Charges



Content Outline

- Framework For Your Product
 - Basic Topics
 - Support your objectives
 - Factual Information
 - Explains each topic



Digital Video

- Compose a Scene
- Alternative Ways
 - Animation
- Editing
 - Connect Each Shot

Sound Recordings

- Narration Script
- Music / Sound Effects
- Ambient Sound
- Editing

Photography

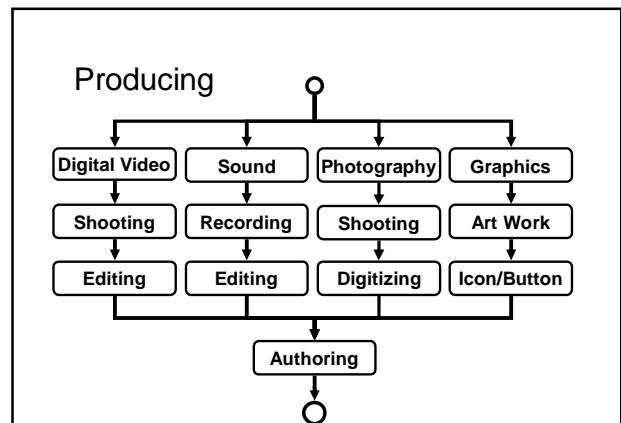
- Shooting
- Digitizing
- Retouching
- Calibration
- Trimming

Graphics

- Art Work
 - Logo, Title, Icon, Button, etc.
- Visual Design and Layout

Authoring

- Integrated Multimedia Contents
 - Combining Various Digital Elements
 - User Interactivity



Evaluation

Rehearsal / Preview

- Formative Evaluation
- Producers' Point of View
 - Technical Check
- Audience's Point of View
 - Validation

Technical Check

- Review the Program
 - Quality of Visuals and Sounds
- Accuracy of Information

Validation

- Show to the Samples from Target Audience
- Check whether the Samples Learn as stated in the Objectives

Validation

- Clarity
 - Preciseness
 - Structure
 - Meaningfulness
- Usability
 - Navigation

Revision

- Where and How to be Revised
- Consider all the Available Ways
 - Production, Schedule, Budgets
- Choose the Best Way
 - Make the Material More Effective

Distribution

- Prepare Materials
 - Support Instructions
 - Guidebook / Worksheet
- Show to the Target Audience
- CD-ROM
- WBT

Evaluation

- Summative Evaluation
 - Has the desired performance been achieved?
- Audience Achievement
- Media and Methods

