Design Document

1	Introduction
	When you've finished writing the course outline, including lesson outlines and have decided instructional methods and media, you're ready to write the design document.
	What is a Design Document?
	The design document specifies all the decisions made about the course up to this time, including:
	Purpose of the course
	• Intended outcome of the course (performance improvement objectives and measures)
	Audience description
	• Delivery method(s)
	What to train
	High level outline
	Detailed lesson outlines
	Objectives of each lesson
	Assessments/exercises for each task
	Purpose of the Design Document
	The purpose of the design document is to obtain agreement for all involved parties as to the vision and plans for the course. These parties include:
	• External clients, if any
	Internal clients and reviewers
	Team members working on the course



Contents of a Design Document

As mentioned above, the Design Document includes all decisions made about the course up to the time of the writing. It can include some or all of the above topics:

- Document description
- Purpose of the course
- Audience description
- Major course objectives
- Learning assessment
- Instructional strategies
- Media
- Time
- Course structure description
- Course scope (units, lessons, topics often in outline form)
- Development tools
- Detailed outline by unit/module, including:
 - Introduction
 - Objectives
 - Methods of instruction
 - Practice
 - Time
 - Topic list
- Ownership and maintenance
- Development time
- Support requirements
- Project signoff sheet ID, Project Manager, Client (internal or external)

Design Document, continued		
{	擅	Sign-off
		Obtaining sign-off on the design document is important in ensuring agreement on the plans at this point. When you have that agreement, you're ready to move forward and develop the actual training materials.
		Formats of Design Documents
		The design document can take various formats or layouts. One type of design document is a narrative document, such as shown on the next page and in Appendix A.

Document Description	The Design Document is presented to the Management and Subject Matter Experts of JEM Communications, LLC in order to document the design plans for the ABCs of Instructional Design one-day course.
Purpose of the Course	The ABCs of Instructional Design is designed to provide basic training in the tasks required to develop effective classroom training. The course will focus on the tasks most critical to instructional design and most different from those tasks involved in technical writing.
	The course is not designed to teach participants all details of instructional design but to provide a solid start in learning the skills and knowledge required to be an effective instructional designer. At the end of the course, participants will be encouraged to evaluate their current skills and the steps they need to continue to develop their instructional design expertise.
Audience Description	The primary audience consists of individuals who are currently technical communicators in a variety of fields. Some may have experience in instructional design; however, that experience is not a pre-requisite to the course.
	The experience level is heterogeneous from the standpoint of backgrounds, education, age, specific skills, and prior experience. Some will be students, and others will be seasoned technical communicators. All are assumed to have the desire to increase their knowledge and/or skills in the area of instructional design.
Major Course	After completing this course, the learner will be able to
Objectives	Conduct a task analysis.
	Organize a course based on the task analysis.
	Write performance-based objectives.
	 Write assessments and practices that mirror the objectives and require learners to apply their newly gained skills and knowledge
	Determine effective methods for the desired outcomes
	Determine media to use
	Determine data to use in evaluating training



Formats of Design Document

Other companies use a landscape design document format, such as is shown on this page and the next.

Lesson 2: Maintaining the Sales Floor

Time: 22 minutes

Prerequisites: Getting Started at CSK and Lesson 1 of this module, "Meeting Your Customer's Needs"

Objectives:

Page 5

- · Given a scenario of merchandising, identify the possible effects on customers.
- · Given a scenario of a messy floor, determine the best course of action.
- Given a list of sales floor terms, correctly match the terms to the actual items.
- · Identify the location number and the parts number on a bin label.
- · Locate the part number on a back room label.
- · Identify merchandising errors on an aisle or product and identify how to fix some of them.
- · Identify housekeeping tasks on a sales floor area.

Subsequent Events: Module 3

Time	Topic/	Content	Design/Treatment
30 sec.	Lesson Introduction	Purpose: help new associates become more familiar with the store layout, our product and merchandising standards.	Center of sales floor Audio: Jake – transition statement and introduction of lesson, giving its importance and purpose Assumption of pre-requisites
1 min.	Merchandising Basics	Rating Scale Question Q Setup: Look at the pictures of the two stores, then rate how you feel about each company. Scale is 1 – 5, unlikely > likely to purchase at this store Second scale for each is unlikely > likely to return to this store.	Audio: Jake (VO): introducing the activity as a preface to talking about merchandising. Two pictures of stores — one clean & neat, properly merchandised, the other messy (empty shelves, stuff on the floor, product on wrong shelves, a spill, a broken spill, etc.) — two different stores and company names — maybe two different types of merchandise? Learners rate their feelings about how they feel about the store.

Design Document: What & Why

Time	Topic/	Content	Design/Treatment
1 min.		Customer's first impression	Background is inside store that's well merchandised
		Customers judge us on many factors	Jake is in front
		Definition of merchandising	Audio: Jake – driving home the affect of a well-merchandised store
		Strategy for selecting, storing, and displaying products to maximize sales	Bullets on side
		Good merchandising plan is a large part of what makes certain stores feel more "shop-able" than others	
1 min.		Responsibilities of merchandising:	Same but with associates working on stocking shelves in store;
		Corporate office selects products	might be able to pull this from one of the videos.
		 Storing and displaying products are daily responsibility of every store 	Audio: Jake explaining who's responsible for merchandising and how it's not an accident.
		Responsibilities of all associates – especially when no customers are present	
		Merchandise pro/section specialists – some stores have	
1 min.		Rules of merchandising	Picture of messy store.
		Always open a store that is fronted and faced	Audio: Jake (VO).
		Always show full shelves and pegboards	
		Always use signage that is complete	
		Always finish merchandising projects before the weekend	

Document Description	The Design Document is presented to the Management and Subject Matter Experts of JEM Communications, LLC in order to document the design plans for the ABCs of Instructional Design one-day course.		
Purpose of the Course	The ABCs of Instructional Design is designed to provide basic training in the tasks required to develop effective classroom training. The course will focus on the tasks most critical to instructional design and most different from those tasks involved in technical writing. The course is not designed to teach participants all details of instructional design but to provide a solid start in learning the skills and knowledge required to be an effective instructional designer. At the end of the course, participants will be encouraged to evaluate their current skills and the steps they need to continue to develop their instructional design expertise.		
Audience Description	The primary audience consists of individuals who are currently technical communicators in a variety of fields. Some may have experience in instructional design; however, that experience is not a pre-requisite to the course. The experience level is heterogeneous from the standpoint of backgrounds, education, age, specific skills, and prior experience. Some will be students, and others will be seasoned technical communicators. All are assumed to have the desire to increase their knowledge and/or skills in the area of instructional design.		
Major Course Objectives	After completing this course, the learner will be able to Conduct a task analysis. Organize a course based on the task analysis. Write performance-based objectives. Write assessments and practices that mirror the objectives and require learners to apply their newly gained skills and knowledge Determine effective methods for the desired outcomes Determine media to use Determine data to use in evaluating training		
Learning Assessment	No formal assessment will be required; however, participants will work with a case study throughout the course to begin to apply their skills and knowledge.		

•••••••••••••••••••••••••••••••••••••••		
Instructional Strategies	The course will be an instructor-led course, with a slide presentation and many exercises. The following methods will be employed at various places in the course: • Demonstration • Discussion • Question and answer exercises • Case study involving extensive practice of new skills to solve a problem • Classification and discrimination of new concepts • Application of guidelines	
Media	The course will utilize the following media:	
Time	This course takes 8 hours to complete.	
Course Structure Description	The course is divided into five lessons plus the course introduction and review and summary lessons. Additional features of the course include: • Table of contents • References • Sample design document • Enlarged graphics of key processes and concepts • Sample instructor and student guides for evaluation • Sample job aids for evaluation	

Course Scope

The course will contain five lessons, covering the following tasks.

Introduction to Instructional Design

→ The Instructional Design Process

Analysis

- → Performance Analysis
- → Training Needs Analysis
- → Task Analysis: "Stickie Bingo"
- → Conducting the Task Analysis

Design

- → Identifying Performance Objectives
- → Writing Performance Objectives
- → Writing Assessments
- → Creating the Course Structure
- → High Level Outline
- → Organizing Lessons
- → Design Document

Developing the Course

- → Methods and Outcomes
- → Exercises and Activities
- → Deciding Media
- → Writing Instructional Materials
- → Creating Visual Materials

Implement and Evaluate

- → Pilot Test and Revise
- → Evaluating the Training

Development Tools

The course will be assembled and developed in Microsoft WordTM and Microsoft PowerPointTM. The following additional tools will be used as necessary:

- FullshotTM for taking screen captures
- Microsoft VisioTM
- Adobe PhotoshopTM

Detailed Outline: Introduction	The course includes 11 units, each with at least one lesson. Detailed outlines, including objectives and assessments are given in the sections below: Lesson 1: An Introduction to Instructional Design 1. Introduction 2. Lesson objectives: a. Identify shifts in thinking that you may have to make as an instructional designer b. Identify activities associated with instructional design process stages 3. Method: lecture/discussion 4. Practice: Discussion of topics with regards to how the process differs from that of the technical communicator. 5. Approximate time: 30 minutes 6. Topic list - The instructional design process a. The process for developing a course b. Activities at each stage c. ADDIE	
Detailed Outline: Lesson 1		

Detailed Outline: Lesson 2

Lesson 2: Analyzing the Needs

- 1. Introduction
- 2. Objective:
 - a. Given a job, learners will analyze the job to include 4 roles, 4 tasks, the steps or guidelines for one task along with the knowledge for each, and the related processes and knowledge. Learners will document the analysis using post-it notes.
- 3. Method: demonstration
- 4. Practice: learners will analyze a job to the task and knowledge level, using post-its to represent the analysis
- 5. Approximate time: 90 minutes
- 6. Topic list:
 - a. Performance Analysis
 - i What is it
 - b. Training Needs Assessment
 - Components of the Training Needs Assessment
 - c. Task Analysis
 - i The Task Analysis
 - a) What it is
 - b) Why we do it
 - c) What we do with it
 - d) How is it different from training
 - ii Analysis Strategies
 - iii Analysis Resources
 - iv Structure of the Task Analysis
 - v Conducting the Analysis, or "Stickie Bingo"
 - d. Conducting the Task Analysis Demonstration
 - i What is a job?
 - ii Analyzing Roles
 - iii Analyzing Tasks
 - iv Types of Tasks
 - v Analyzing Steps and Guidelines
 - vi Steps and Guidelines
 - vii Analyzing Knowledge
 - viii Tasks and Knowledge
 - ix Analyzing Processes
 - x What are Processes
 - xi Stages of a Process
 - xii Completed Diagram
 - e. Exercise/case study
 - ii Instructions
 - iii discussion

Detailed Outline: Lesson 3

Lesson 3: Designing the Course

- 1. Introduction
- 2. Objectives
 - a. Given a task in the task analysis, learners will write a performance objective for that task
 - b. Given the objective, learners will plan a practice or assessment for the objective
 - c. Given the full task analysis, learners will create the high level outline for the course.
- 3. Method: lecture, demonstration, pencil/paper exercises
- 4. Practice: writing objectives, assessment, and outline
- 5. Approximate time: 120 minutes
- 6. Topics
 - a. Identifying Objectives
 - i Importance of objectives
 - ii What is an objective
 - iii Questions to ask to determine objectives
 - b. Writing objectives
 - i Mager objectives
 - ii Exercise valid or invalid objectives
 - iii SMART objectives
 - iv Demonstration
 - v Exercise: write an objective
 - vi Terminal vs. enabling objectives
 - vii Formal vs. informal objectives
 - c. Writing Assessments
 - i What is an assessment
 - ii Exercise write an assessment for the objective
 - d. Creating the Course Structure
 - i Course structure
 - ii Job vs. course
 - iii Course organization
 - iv Organizing units
 - v Organizing lessons
 - vi Deciding what to include
 - e. Organizing the course
 - i Organization principles
 - ii Chunking the content
 - iii Sequencing guidelines
 - iv Example of sequencing and organization
 - f. High level outline
 - i High level outline
 - ii Exercise
 - g. Organizing lessons
 - Lesson structure
 - ii Sample outline
 - h. Design Document
 - What is a design document
 - ii Purpose of a design document
 - iii Sign-off

Detailed Outline: Lesson 4

Lesson 4: Developing the Course

- 1. Introduction
- 2. Objectives:
 - a. Given various outcomes and instructional methods, determine the most effective methods for the outcomes.
 - b. Given sample instructor and student guides, determine the pros and cons of the templates
- 3. Method: discussion and matching exercise
- 4. Practice: matching exercise, evaluation of templates
- 5. Approximate time: 60 minutes.
- 6. Topics
 - a. Methods and Outcomes
 - i Methods
 - ii Gagne's Outcomes
 - iii Typical methods
 - iv Exercise: matching
 - b. Exercises and Activities
 - i Value of exercises and activities
 - ii Using questions
 - iii Content of questions
 - iv Old and new questions
 - c. Deciding Media
 - i Media available
 - d. Writing Instructional Materials
 - i Types of materials
 - ii Writing guides
 - iii Sample guides
 - iv Writing style and format
 - v Job aids
 - e. Creating visual material
 - i Types of visuals
 - ii Media for visuals
 - iii Guidelines for visuals

Detailed Outline: Lesson 5	Lesson 5: Implementing and Evaluating 1. Introduction 2. Objectives: a. Given sample evaluations in scenarios, determine the level according to Kirkpatrick's levels b. Given the task in the case study, determine possible measures for evaluating the effectiveness of the training 3. Methods: lecture, discussion 4. Practice: pencil/paper exercise, case study 5. Topics: a. Pilot Test and Revise i. The Pilot Test ii. Implementation b. Evaluating the Training i. Evaluation ii. Timing iii. Players iv. Problems in Implementing c. Levels of Evaluation i. Kirkpatrick's levels ii. Exercise iii. Measurement Techniques iv. What to measure at levels 3 and 4 v. Tradeoffs of levels 3 and 4 vi. Types of studies vii. Graphs for types of studies viii. Exercise
Ownership	Jane Smith of JEM Communications, LLC will develop the initial course as well as maintain the course by providing all updates to course content and handouts.
Development Time	The time frame for development of the ABCs of Instructional Design course will be the equivalent of one to two concentrated weeks of time.
Support requirements	Jane Smith will provide her own support as well as utilizing current literature in the field of instructional design.

Project Sign-off Please sign below indicating agreement with the proposed course plan and approving start-up of the development phase. Director, JEM Communications, LLC Dat Manager, JEM Communications, LLC Dat Project Manager of Development Team Dat

References for Instructional Design

There are many good sources available on instructional design, e-Learning, and web design. These are only a sampling of good ones.

Books

- Bloom, B.S., Taxonomy of Educational Objectives vol.: cognitive domain. New York: McKay, 1956.
- Brown, Abbie H., and Green, Tim D., *The Essentials of Instructional Design: Connecting Fundamental Principles with Process and Practice.*
- Brown, Frederick, G. (1971). Measurement and Evaluation. Itasca, Ill.: F.E. Peacock
- Clark, Ruth, *Building Expertise: Cognitive Methods for Training and Performance Improvement.*International Society for Performance and Improvement, 1999.
- Clark, Ruth, Developing Technical Training: A Structured Approach for Developing Classroom and Computer-based Instructional Materials. International Society for Performance and Improvement, 1999.
- Clark, Ruth, and Lyons, Chopeta, *Graphics for Learning: Proven Guidelines for Planning, Designing, and Evaluating Visuals in Training Materials.* Pfeiffer, 2004.
- Clark, Ruth, and Mayer, Richard E., e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning. Jossey-Bass/Pfeiffer, 2002.
- Driscoll, Margaret, Web-Based Training: Using Technology to Design Adult Learning Experiences. Jossey-Bass/Pfeiffer, 1998.
- Flanders, Vincent and Willis, Michael, Web Pages That Suck. Sybex, 1998.
- Gagne, R.M., Briggs, L.J., & Wager, W.W., Principles of Instructional Design. Harcourt Brace, 1985.
- Hall, Brandon, Web-Based Training Cookbook: Everything You Need to Know for Online Training. Wiley Computer Publishing, 1997.
- Hassell-Corbell, Rives, Developing Training Courses: A Technical Writer's Guide to Instructional Design and Development.
- Horton, William and Katherine, E-Learning Tools and Technologies. Wiley Publishing Inc., 2003.
- Horton, William, Designing Web-Based Training. John Wiley & Sons, 2000.
- Jonassen, D.H., Task Analysis Methods for Instructional Design. Erlbaum, 1999.
- Kirkpatrick, Donald, (1994). Evaluating *Training Programs*. San Francisco, CA: Berrett-Koehler Publishers, Inc.

Page 16

Les, William W. and Owens, Diana L., Multimedia-based Instructional Design: Computer-based Training; Web-Based Training; Distance Broadcast Training; Performance-Based Solutions, 2004.

Mager, Robert, F. (1975). Preparing Instructional Objectives (2nd ed.). Belmont, CA: Fearon.

Marzano, Robert J. (1998). *A Theory-Based Meta-Analysis of Research on Instruction*. Mid-continent Aurora, Colorado: Regional Educational Laboratory.

Masie, Elliott, *The Computer Training Handbook: Strategies for Helping People to Learn Technology.* Lakewood Books, 1997.

Mayer, Richard E., *Multimedia Learning*. Cambridge University Press, 2001.

Merrill, M. David, Instructional Design Theory. 1994.

Merrill, M. David., Teaching Concepts: An Instructional Design Guide.

Morris, Mary E. S., and Hinrich, Randy J., Web Page Design. SunSoft Press, 1996.

Nielsen, Jakob, Designing Web Usability. New Riders Publishing, 2000.

Priskurich, George M., Rapid Instructional Design: Learning ID Fast and Right

Rogoff, Rosalind, The Training Wheel: A Simple Model for Instructional Design. Wiley.

Rossett, Allison, First Things Fast: A Handbook for Performance Analysis. Jossey-Bass Pfeiffer, 1999.

Rossett, Allisoon, Training Needs Assessment. Educational Technology Publications, 1987.

Shrock, Sharon A., and Coscarelli, William C.C., *Criterion-Referenced Test Development*. International Society for Performance Improvement, 1989.

Shrock, Sharon A., and Coscarelli, William C.C., *Criterion-Referenced Test Development*. International Society for Performance Improvement, 1989.

Siegel, Kevin A., Essentails of Technical Writing and Instructional Design., 2000.

Skinner, B.F. (1974) About Behaviorism. New York: Alfred A. Knoph.

Stolovitch, Harold D. and Keeps, Erica J., *Handbook of Human Performance Technology: a Comprehensive Guide for Analyzing and Solving Performance Problems in Organizations*. 1992: Jossey-Bass Managem.

Stolovitch, Harold, Telling Ain't Training. 2002: American Society for Training and Development.

Thiagarajan, Sivasailam, Design Your Own Games and Activities: Thiagi's Templates for Performance improvement. 2003: John Wiley & Sons.

Thiagarajan, Thiagi, *Thiagi's Interactive Lectures*.2005: American Society for Training and Development.

Tufte, Edward R., The Visual Display of Quantitative Information

Tufte, Edward R., Visual Explanations: Images and Quantities, Evidence and Narrative

U.S. Army Field Artillery School (1984). A System Approach To Training (Course Student textbook). ST - 5K061FD92

Websites

www.thecounter.com - source of statistics of Internet users.

www.trainerslink.com/ - source of good information on training and instructional design

www.stcsig.org/idl/ - Instructional Design and Learning Special Interest Group of STC web site.



Jane L. Smith JEM Communications, LLC <u>www.jemcommunications.com</u> 928-284-0455