

Table of Contents

Overview

	Page
1. What Is e-Learning?	1
2. Developing an e-Learning Strategy.....	13
3. Managing an e-Learning Project.....	29
4. Tools of the Trade.....	61
5. The Analysis Phase	89
6. The Design Phase: Broad Strategies.....	101
7. The Design Phase: Course Features and Functions.....	117
8. The Development Phase: Writing the Course	149
9. The Development Phase: Putting the Course Together	165
10. The Implementation Phase	183
11. The Evaluation Phase	189
12. Preparing Yourself for the Future.....	197
Glossary.....	211
Index.....	217

Table of Contents

Details

Chapter 1

What Is e-Learning?	1
Types of e-Learning	2
Synchronous Learning	2
Asynchronous Learning	3
Virtual Classroom Learning	3
Advantages and Disadvantages of e-Learning	5
Advantages of e-Learning	5
Disadvantages of e-Learning	7
Elements of an e-Learning Course	9
Interface	9
Text	9
Navigation	9
Interactions	10
Tests	10
Media	10
Collaboration	11
Tracking	12
Summary	12

Chapter 2

Developing an e-Learning Strategy	13
Strategic Plans and e-Learning	14
Benefits of a Strategic Plan	14
How Detailed Should a Strategic Plan Be?	15

Strategic Plans vs. Business Cases	15
Strategic Plans vs. Project Plans.....	15
The Underlying Business Goals and Benefits.....	16
Know What You Are Analyzing.....	16
Tying e-Learning to Business Goals.....	17
Benefits of the Training Program.....	17
Benefits of the e-Learning Delivery Platform	18
Benefits of a Training Management System	18
Cost/Benefit Analysis	20
Quantifying Benefits	20
Quantifying Costs.....	21
Direct Program Costs	21
Indirect Costs	22
Comparison Methods.....	22
Comparing Costs to Costs.....	22
Comparing Costs to Benefits	23
Calculation Methods.....	24
Generating Support.....	24
Identify Stakeholders	25
Recognize Priorities, Motives, Obstacles.....	26
Educate on Features, Benefits, Costs.....	26
Summary	27

Chapter 3

Managing an e-Learning Project.....	29
Project Management	30
Project Management and the ADDIE Model.....	30
Define the Project	31
Steps for Defining Your Project.....	31
Deliverables for the Definition Phase.....	32
Plan the Project	35

Table of Contents

Implement, Monitor, and Adjust the Project.....	36
Evaluate the Project	37
Budgeting	37
Acquisition Approaches	38
Types of Expenses.....	39
Development Tools.....	39
Off-the-Shelf Courseware	41
Synchronous Platforms.....	41
Learning Management Systems & System Integration	42
Technical Upgrades	44
Internal Team Members or Contractors.....	45
Outsourcing Development	46
Other Costs	47
Resources.....	47
Skills Needed	47
Timelines	49
Development Ratios.....	49
Turnaround Time.....	49
Your First Courses.....	51
LMS Implementations	52
Working with Vendors.....	52
Caveat Emptor.....	52
RFIs and RFPs.....	52
Creating an RFI.....	53
Creating an RFP	54
Evaluating Vendor Responses	56
Tips for Working with Vendors.....	57
Get everything in writing.	57
Put protections in the contract for you!	57
Know what happens if the vendor goes bankrupt.	58
Keep a single point of contact.	58

Keep Ownership of Copyright, Data, and Source Code.....	58
Manage changes on your end.	58
Have regular progress updates.....	59
Make payments milestone-based instead of time-based.	59
Be wary of proprietary code.....	59
Be a Good Customer.....	59
Summary.....	59

Chapter 4

Tools of the Trade.....	61
Authoring Tools.....	62
Classifications of Authoring Tools.....	62
Web Authoring.....	63
Course Authoring	63
PowerPoint Conversion Tools.....	64
Features of Authoring Tools.....	64
Checklist Terminology.....	65
Element Tools.....	69
Graphics.....	69
Photo Editing Software	70
Graphics Creation Software	70
Interactions and Animations.....	70
Simulations.....	71
Computer Simulations.....	71
Business and Technical Simulations.....	71
Assessments	72
Quizzes and Tests.....	72
Games.....	72
Audio and Video.....	72
Synchronous Platforms	73
Primary Synchronous Features.....	73

Table of Contents

Content Delivery	73
Application Sharing	74
Whiteboards	75
Chat Features	75
Training Management	75
Surveys and Polls	76
Virtual Classroom Platforms	78
The LMS and Other Management Tools	79
LMS: Learning Management Systems	79
Simple Learning Management Systems	79
Advanced Learning Management Systems	80
Implementation Options	83
LCMS: Learning Content Management Systems	83
Other Information Management Systems	86
HRIS: Human Resource Information System	86
TMS: Training Management Systems	86
Summary	87

Chapter 5

The Analysis Phase	89
Business Analysis	90
The Problem	90
The Business	92
The Learning Environment	93
Audience Analysis	95
Technology Analysis	98
Summary	100

Chapter 6

The Design Phase: Broad Strategies	101
e-Learning and Instructional Design	102
Developing Objectives	103

Deciding on Your Objectives.....	103
Pre-Requisites.....	104
How Should They Be Phrased?.....	104
Elements.....	104
Testability.....	105
Where Do They Go?	105
Structuring the Content.....	105
Content Sequence and Flow	106
Course Hierarchy and Outline	106
Reusable Learning Objects.....	107
Intent.....	108
Design.....	108
Technology.....	108
Instructional Strategies	109
Presentation	110
Practice.....	111
Assessment.....	112
Outlining the Instructional Strategies.....	113
Selecting the Best Format.....	114
Classroom or Distance; Instructor or Self-Paced.....	114
Blended Learning: the Best of Both Worlds.....	114
Special e-Learning Considerations.....	115
Standards and Compliance.....	115
SCORM/AICC Compliance	115
Section 508 Compliance.....	115
Summary.....	116

Chapter 7

The Design Phase: Course Features and Functions	117
Testing and Assessments	118
Determining Your Testing Goals.....	118

Table of Contents

Creating a Testing Strategy	119
Question Types	119
Placement	123
Remediation	124
Randomization	127
Other Options	128
The Question Creation Process	129
The Question Outline List	129
The Fact-Idea-Question List	130
Common Mistakes with e-Learning Questions	130
Interactions	132
Reasons for Interaction	133
Types of Interactions	133
Tips for Designing Interactions	134
Media	135
Graphics and Animations	135
Audio	135
Pros and Cons of Using Audio	135
Audio-Optional	135
Audio Controls	135
Video	136
Interface and Navigation	137
Graphic Design	137
Navigation Options	139
Fixed vs. Flexible Navigation	139
Progress and Location Indicators	140
Special Features and Functions	141
The Design Document	142
Summary	148

Chapter 8

The Development Phase: Writing the Course	149
Working with Storyboards	150
What Is a Storyboard?	150
Elements of Storyboards	153
Page Numbers	153
On-Screen Text	154
Learning Points	154
Learner Instructions	154
Alt-Text	154
Media Elements	154
Audio	155
Video	155
Graphics	155
Other Media Elements	156
File Type and Naming Conventions	156
Programming Instructions	156
Navigation	157
Links, Documents, or Special Features	157
Interactions	157
Questions	157
Storyboard Templates	158
Developing Your Content	160
Organizing Content	160
Converting Existing Content	162
Course Length	162
Anticipating Questions	162
Including ALL the Content	162
Interactions	163
Informal Changes to the ILT Materials	163
Summary	163

Table of Contents

Chapter 9

The Development Phase: Putting the Course Together	165
Rapid Prototyping.....	166
Why Create a Prototype?	166
Selecting the Content for a Prototype.....	167
Rapid Development	168
“Paper” Review Cycles.....	169
Structuring Your Reviews	170
Content Review.....	171
Instructional Design Review.....	172
Editorial Review	172
Assembling the Course.....	173
Course Extras	174
File Names and Version Control.....	174
On-Screen Review Cycles	175
Content Reviews	175
Functionality Review	176
Technical Testing.....	178
End-User Testing.....	179
Planning Your User Testing	179
Conducting Your User Testing	180
Acting on Your Results	180
Summary	181

Chapter 10

The Implementation Phase	183
Preparing the Audience	184
Bosses	184
Learners.....	184
Environment.....	185

Incentives and Disincentives.....	185
Hoo-Hah.....	186
Ongoing Management.....	187
Troubleshooting.....	187
Revisions and Updates	187
Reporting.....	187
Summary	188

Chapter 11

The Evaluation Phase	189
Level 1 Evaluation: Student Reaction.....	190
Goal of Level 1 Evaluation	190
Specific Questions to Ask	191
Questions for Evaluating any Training Format.....	191
Questions Unique to an e-Learning Course	191
Methods for Collecting Data.....	192
Level 2 Evaluation: Learning.....	192
Testing Within the Course	193
Blended Approaches	193
Validating Your Tests.....	193
Levels 3 – 5 Evaluation: Impact.....	194
Level 3: Transfer.....	194
Level 4: Results	194
Level 5: Return on Investment.....	195
Summary	196

Chapter 12

Preparing Yourself for the Future.....	197
Skills/Career Opportunities	198
Instructional Design.....	199
Writing/Course Developing	199

Table of Contents

Editing	199
Programming/Course Assembly.....	200
Graphic Design	200
Quality Assurance Testing	200
Online Instructing	201
Voice/Video Talent	201
Audio Recording and Editing.....	201
Video Production and Editing.....	202
Resources to Help Learn More	202
Websites.....	203
Books.....	204
Conferences.....	205
Certifications	206
e-Newsletters	207
Blogs	208
Forums.....	209
Summary	209

Glossary	211
-----------------------	------------

Index.....	217
-------------------	------------

Index

Acrobat Connect, 41, 73, 101

ADDIE model, 30, 36

Adobe

Connect, 41, 73, 101

Director, 72, 100

Flash, 70, 71, 98, 99

Illustrator, 70, 98

Photoshop, 70, 98

Photoshop Elements, 70, 98

Premiere, 72, 100

Premiere Elements, 72, 100

Presenter, 64, 92

ADP, 86, 114

AICC, 64, 92

alt text, 154

analysis, 32, 34, 51

animation, 10, 135

application sharing, 74, 102

Articulate

Presenter, 64, 92

Asynchronous Learning, 2, 3

Atlantic Link, 40

audience preparation, 184-86

audio, 10, 73, 101, 201

authoring tool, 44, 62-69

bandwidth, 35

benefit analysis, 20-24

Blackboard, 4

blog, 11, 208

bookmark, 141

books, 204

brandon-hall.com, 46

Broadcast, 71, 99

CAL. *See* Computer-Assisted Learning

Camtasia, 40, 71, 99

Captivate, 40

Index

career

- audio editing, 201
- audio recording, 201
- course assembly, 200
- course developer, 199
- editing, 199
- graphic design, 200
- instructional designer, 199
- online instructing, 201
- opportunities, 198–202
- programming, 200
- quality assurance testing, 200
- video editing, 202
- video production, 202
- video talent, 201
- voice talent, 201
- writer, 199

caveat emptor, 52

CBT. *See* Computer-Based Training

CD, 1

certifications, 206

chat, 75, 103

Citrix GoToMeeting, 73, 101

CMI. *See* Computer-Managed Instruction

collaboration, 7, 11

Computer-Assisted Learning, 4

Computer-Based Training, 4

Computer-Managed Instruction, 4

conferences, 205

constraints, 33

content

- convert existing, 162–63

- develop, 160–63

- organize, 160–61

- review, 171

copyright, 58

cost

- analysis, 20–24

- comparison, 22–23

- cost benefit ratio, 24

- direct, 21

- indirect, 22

- quantifying, 24

course authoring tools, 38, 63, 91

course element tools, 40

courseware

- acquisition, 38

- off-the-shelf, 38, 41

- design, 34
 - document, 142-48
 - interactions, 132-34
 - interface, 137-42
 - media, 135-37
 - navigation, 137-42
 - phase, 34, 118-141
 - testing, 118-32
 - timeline, 51
- development, 34
 - custom, 38
 - internal, 38
 - outsourcing, 45
 - phase, 149-81
 - ratios, 49
 - skills for internal team, 47
 - timeline, 51
 - tools, 38
 - turnaround time, 49
- Director, 72, 100
- disincentive, 185
- Disk, 5
- Editor, 45
- editorial review, 172
- editorial review questions, 169-73
- e-learning
 - acronyms, 4
 - advantages, 5-7
 - asynchronous, 2
 - budgeting, 37-47
 - definition, 1
 - disadvantages, 7-8
 - management, 29-59
 - managing resources, 47-52
 - resources, 47-52
 - risk, 35
 - strategy, 13-27
 - synchronous, 2
 - types, 2
 - virtual classroom, 3, 4
- element tool, 69-72, 69-72
- e-newsletters, 207
- Enterprise Resource Planning. *See* ERP
- environment, 185
- ERP, 86, 114
- evaluation, 34, 37
 - learning, 192-94
 - level 1, 190-92
 - level 2, 192-94
 - level 3, 194
 - level 4, 195

Index

- level 5, 195
- results, 195
- return on investment, 195
- student reaction, 190–92
- timeline, 51
- transfer, 194
- ExperiencePoint, 71, 99
- FAQ, 141
- Fireworks, 40
- fixed navigation, 139
- Flash, 70, 71, 98, 99
- FlashDemo
 - FlashPoint, 64, 92
- FlashPoint, 64, 92
- flexible navigation, 139
- font, 26
- Forio
 - Broadcast, 71, 99
- forum, 11
- forums, 209
- Frequently Asked Questions. *See* FAQ
- games2train.com, 72, 100
- GameShow Pro, 72, 100
- glossary, 141
- GoToMeeting, 41, 73, 101
- graphic artist, 45, 137
- graphics, 10, 135
- graphics design, 137
- handouts, 141
- Harbinger Group
 - Raptivity, 70, 72, 98, 100
- HCMD, 86, 114
- help menu, 141
- hoo-hah, 186
- hosted, 65, 93
- HTML Editors, 63, 91
- Human Capital Management and Development. *See* HCMD
- implementation, 183–88
 - disincentive, 185
 - hoo-hah, 186
 - incentive, 185
 - tips, 186
- incentive, 185
- index, 141
- instructional design review, 172
- instructional designer, 45
- interaction types
 - collaborative activities, 134
 - offline activities, 133
- interactions, 10, 132–34
- interface, 9, 137–42

- Internet, 1, 5
- intranet, 5
- job aid, 141
- LCMS, 44
- Learning Content Management System.
 See LCMS
- Learning Management System. *See* LMS
- LearningWare
 - GameShow Pro, 72, 100
- lesson plan grid, 129, 130, 151, 159, 177,
 203, 204, 205, 206, 207, 208, 209
- LiveMeeting, 73, 101
- LMS, 41, 58
 - implementation, 52
 - price ranges, 43
 - system integration, 42
- management
 - ongoing, 187
 - reporting, 187
 - revisions, 187
 - troubleshooting, 187
 - updates, 187
- media, 135–37
 - animations, 10, 135
 - audio, 10, 135
 - graphics, 10, 135
 - video, 10, 136
- Microsoft
 - LiveMeeting, 41, 73, 101
 - Picture Manager, 70, 98
 - PowerPoint, 70, 98
 - Project, 36
 - Windows Movie Maker, 72, 100
- Movie Maker, 72, 100
- navigation, 9, 137–42
- objectives, 31, 33
- obstacles, 33
- packaged courseware, 40, 65, 93
- page counters, 141
- PDA. *See* personal desktop assistant
- personal desktop assistant, 5
- Photoshop, 40, 70, 98
- Picture Manager, 70, 98
- planning, 34
- PeopleSoft, 86, 114
- poll, 76, 104
- posted, 40
- PowerPoint, 70, 98
- PowerPoint Conversion Tools, 64, 92
- PowerSim
 - Software Studio, 71, 99
- Premiere, 72, 100

Index

prepare

- audience, 184–86
- environment, 185

Presentation Pro

- PowerCONVERTER, 64, 92

Presenter, 64, 92

progress indicators, 141

project charter, 32

project definition statement, 32

project management model, 30, 36

Proofreader, 45

Qarbon

- ViewletBuilder, 71, 99

question

- common mistakes, 130–32
- drag-and-drop, 122
- essay, 121
- fill-in-the-blank, 121
- matching, 120
- multiple choice, 119
- outline list, 129
- placement, 123
- randomized, 35
- remediation, 124–27
- short answer, 121
- simulation, 122

true/false, 120

types, 119

QuestionMark Perception, 40

rapid

- development, 166–69
- prototyping, 166–69

Raptivity, 40, 70, 72, 98, 100

remediation, 124–27

Requests for Information. *See* RFI

Requests for Proposal. *See* RFP

resources

- blogs, 208
- books, 204
- certifications, 206
- conferences, 205
- e-newsletters, 207
- forums, 209
- Websites, 202

return on investment, 195

review, 6

- content, 171
- editorial, 172
- instructional design, 172
- sample storyboard review process, 170
- structure, 170

review cycle, 169–73

- RFI, 52–56
- RFP, 52–56
- Risk, 35
- ROI. *See* Return on Investment
- scope of work, 32
 - sample, 34
- SCORM, 64, 92
- Second Life, 3, 71, 99
- section 508, 65, 93
- shared documents, 11
- skills, 198
- SME, 45
- Software Studio, 71, 99
- source code, 58
- steakholder, 24–26, 33
 - education, 26
 - groups, 26
 - identify, 25
 - worksheet, 25
- storyboard
 - audio, 154
 - checklist, 159
 - documents, 157
 - elements, 153–60
 - graphics, 154
 - interactions, 157
 - links, 157
 - media elements, 154
 - navigation, 157
 - on-screen text, 154
 - other media elements, 156
 - page numbers, 153
 - programming instructions, 156–58
 - questions, 157
 - sample template, 151, 152
 - special features, 157
 - template checklist, 159
 - templates, 158
- strategic plan
 - benefits, 14
 - business case, 15
 - project plan, 15
- subject matter expert. *See* SME
- survey, 76, 104
- synchronous learning, 2
- synchronous platform, 73–78
- taxonomy, 159
- TBT. *See* Technology-Based Training
- Technology-Based Training, 4
- TechSmith
 - Camtasia Studio, 71, 99
- testing, 118–32

Index

- tests, 10
- text, 9
- TMS, 86, 114
- tools
 - authoring, 62–69
 - classification, 63, 91
 - course authoring 63, 91
 - element, 69–72
 - graphics creation software, 70, 98
 - HTML editors, 63, 91
 - management systems, 42–44
 - photo editing software, 70, 98
 - PowerPoint Conversion, 64, 92
 - synchronous platform, 73–78
 - virtual classroom platform, 78–79
 - Webcast, 61, 89
- tracking, 6, 12, 36
- Traning Management System. *See* TMS
- turnaround time, 49
- vendor
 - evaluating responses, 56
 - tips, 56
 - working with, 52–59
- video, 10, 74, 102
- Viewlet Builder, 71, 99
- Virtual Classroom Learning, 2, 3, 4, 78, 106
- virtual world, 3
- WBT. *See* Web-Based Training
- Web authoring, 62, 90
- Web designer, 45
- Web logs. *See* blog
- Webcast, 3, 38, 61, 73, 75, 76, 78, 89, 101, 103, 104, 106
- WebEx, 41, 73, 101
- Webinar, 3, 4
- Website, 1, 202
- whiteboard, 74, 102
- wiki, 11
- Wikipedia, 11
- Windows Movie Maker, 72, 100
- writer, 45