

Index

A

Alice's Adventures in Wonderland (Carroll), 60
Allen Communications, 53, 77
Allen, M., 53, 59
AMA Handbook of E-Learning, 319, 345–346
Analysis: competency, 84–87; computer-aided, 87–89; criticality, 68–71; job, 60–80; job aid, 88–89; learning, 76; reason for, 59–60; task, 68–71; trainee (audience), 76–84; types of, 59–60
Analysis data-collection methods, 50–51; and focus groups, 51–52; and hybrids, 59; and interviews, 54–56; and observation, 57–58; surveys or questionnaires, 55–56
“Applying Graphic Design Principles” (King), 233
Assessment: organization needs, 19–20; performance, 20–36; performance gap, 21–23; performance opportunity, 23
ASTD Handbook of Training Design and Delivery (Piskurich), 93, 249
ASTD website, 297
Asynchronous e-learning design: advantages of, 324; analysis, 322–325; audience analysis for,

325; and blended e-learning, 306–307; comprehensive strategy for, 308–311; creating and implementing system for, 307–308; and creating e-learning vision, 310–311; definitions, 305–307; delivery analysis for, 322–323; designing and developing good programs for, 311–312; disadvantages of, 324; effective monitoring and evaluation plan for, 320–322; evaluating programs for, 337–338; learner evaluation in, 332–333; learning management and learning content management systems for, 312–315; planning successful implementation for, 319–320; program activities and interactions, 327–331; repurposing, 336–337; self-assessment, 318–319; selling points for, 315–316; software, 335–336
Audience analysis (trainee analysis): additional data for, 81–82; data gathering methods for, 77–78; overview, 76–77; questions (for managers and initiators), 79–80; report, 83–84; template, 80–81; and top audience characteristics, 83
Authorware software, 335

B

“Basic Training: Getting Ready to Present” (Withers), 249
Behaviors, 121–123
Bell, C., 93
Berge, Z., 369
Beta tests, 388; and asynchronous e-learning, 334; considerations, 239–240; for implementation, 237–246; and on-the-job-training, 240; pilots *versus*, 242–243; and self-instructional programs, 241; simulation, 238–239
Blended E-Learning (Mantyla), 307
Brethower, D., 25–26
Brockbank, B., 315
“Business Analysis” (*HPI Essentials*), 16
Business integration, 10

C

Carey, L., 2
Carroll, L., 60
CBA. *See* Cost-benefit-analysis
CBT. *See* Computer-based training
CD-Rom-based training, 177–180, 292–293; program development for, 231–233
Chat rooms, 367, 389

- Checklists: for beta test and pilot review, 245–246; for CD-Rom program development, 230–231; for computer and CD-ROM-based training, 263; for e-learning, 341; for instructional design, 13; for lesson plan, 220; objective, 166; for performance, 163–167, 402; self-instruction facilitator, 255; synchronous class initiation, 376–378; video production, 236
- Chunking, 116, 159, 389
- Class reaction sheet, 269
- Classroom training: and delivery, 94–95; design, 174–175; and development, 184; evaluation, 290; implementation, 248–249
- Competency analysis, 390; categories of standards, 85–86; definition and method, 85; *versus* job and task analysis, 86–87; questions to ask in, 85
- Competition, 10
- “Comprehensive Open Skill Test Design” (Desmedt), 163
- Computer-aided analysis, 87–89
- Computer-based training (CBT), 177–180, 228–236, 292–293, 390
- “Comprehensive Open Skill Test Design” (Desmedt), 163
- Consistency, 10–11
- Constraints, design: and facilitator assessment, 107–108, 115; questions for categories of, 99–101; selecting delivery method by project for, 101–106
- Continuous interactions, 366–367
- Cory, G., 301–302
- Coscarelli, W., 160–161
- Cost effectiveness, 7–8
- Cost-benefit-analysis (CBA), 39–47, 391; and benefits, 45; and costs, 40–44; and items to consider when calculating training costs, 42; and other benefits associated with training, 45; and ROI, 45–47; and some average costs for training resources and time for development, 43–44
- Costs, Benefits, and Productivity in Training Systems* (Kearlsey), 39
- Creative Training Techniques* (Pike), 7
- Criterion-Referenced Test Development* (Shrock and Coscarelli), 160–161
- Criticality analysis, 391; and job analysis form, 69–70; matrix for, 68; questions for, 69–70
- D**
- Data-collection. *See* Analysis data-collection methods
- “Defining Internet-Based and Web-Based Training” (Driscoll), 179
- Delivery: blended systems of, 97–98; and classroom training, 94–95; decision, 92–115; distributed, 250–251; final criteria for selection of, 109–114; general methods of, 93–94; and instructor-led classrooms, 93; and job performance aids, 93, 97; and on-the-job training (OJT), 93, 95; and self-instruction, 93, 95; and technology-based training, 93, 96; and training by documentation, 93–94; and Web-based training, 96
- Denova, C., 167, 205
- Design: classroom, 174–175; and constraints, 99–106; course descriptions, 145–146; and delivery selection, 91–99, 109–114; and facilitator assessment, 107–108, 115; gathering content for, 146–150; hints for various formats, 174–181; objectives, 115–130; and structure, 151–159; and trainee evaluation, 159–174
- Design document, 392; in detail, 134–145; overview of, 130–133; template, 131–133
- Designer, definition of, 6
- Designer's Edge* (Allen Communications), 53, 77
- Designing World-Class E-Learning* (Schank), 323
- Desmedt, J., 163
- Development: end products of, 183–185; and games, 201–204; handouts *versus* pass-outs in, 195; imbedded questions and, 205–206; internal summaries and, 205; and lesson plan, 185–201; post-class activities and, 206–207; pre-activities, 188–194; supplies list, 207–208
- Dick, W., 2
- “Discussion Groups and Chats” (*AMA Handbook of E-Learning*), 367
- Distance Learning* (Mantyla and Gividen), 93, 180
- Distributed delivery, 250–251, 261–262
- Documentation, training by, 93–94
- Donovan, L., 319
- Driscoll, M., 179
- E**
- Effective Training Delivery, 92
- E-learners: job aid for, 317–318; preparing and motivating, 317; preparing to be synchronous, 373–374
- E-learning: asynchronous, design, 305–343; blended, 306–307; design, 233–234, 339; vision, 310–311
- E-learning design: asynchronous, 305–343
- E-learning programs, 98, 108, 233–234, 264, 293–294, 393
- E-Learning: Strategies for Delivering Knowledge in the Digital Age* (Rosenberg), 308
- Electronic performance support systems (EPSS), 301–302, 393
- Electronic Support Systems* (Cory), 301–302
- Embedded tests, 157
- End products: of development, 183–185; lesson plan as, 185–187
- EPSS. *See* Electronic performance support systems (EPSS)
- Evaluating E-Learning* (Horton), 337
- Evaluating Training Programs: The Four Levels* (Kirkpatrick), 268
- Evaluation: hints for, 290–294; key to good, 268–270; reason for, 267–268; revisions, 286–290; of self, 269–270; of self-instruction programs, 282–286; types of, 271–282
- F**
- Facilitator: assessment, 107–108, 115; in classroom, 107; defini-

- tion of, 5–6, 394; guide template, 356–358; and on-the-job training, 108; and self-instruction, 107–108; training, 369–372
- Figuring Things Out* (Zemke), 50
- First Things Fast* (Rossett), 20
- Focus groups: example, 51–52; facilitating, 53–54; participants, 52–53
- Front-end analysis. *See* Performance assessment
- Frye, C., 229
- G**
- Gallup, D., 93
- Games, 201–204
- Games Trainers Play* (Newstrom), 201–202
- Gayeski, D., 146
- “Getting Inside and Expert’s Brain” (Gayeski), 146
- “Getting Ready for Synchronous E-Learning” (Hoffman), 345–346
- Getting the Most from Online Learning* (Piskurich), 372
- Gividen, J. R., 93, 180
- Granular training, 299–300
- Graphics, 331–332, 364
- Gunther-Mohr, C., 98
- H**
- Hall, B., 179
- Handbook of HPT Message Design* (Stolovich), 234
- Handbook of Human Performance Technology* (Stolovich), 23
- Hartley, D., 315
- Hartnett, J., 229
- Hints: for better CD-Rom program development, 231–233; for developing material, 221–236; for e-learning design, 233–234, 339; for evaluating, 290–294; for implementation, 257–265; for interacting successfully on line, 374–375
- Hoffman, J., 345, 346, 352
- Holton, E., III, 18
- Horton, B., 337
- How to Write Training Materials* (Stoneall), 224
- HPI Essentials* (Piskurich), 16, 23, 27
- HPT. *See* Human performance technologist
- HTML, 234, 395
- Human performance technologist (HPT), 27
- Hybrids, 59
- I**
- IAMA Handbook of E-Learning*, 315
- Icebreakers, 192–193
- Implementation, 237–265; and administration guide, 256–257; and beta tests, 237–246; classroom, 248–249; common issues, 248–257; conducting distributed self-instructional, 261–262; hints for, 257–265; and learning centers, 250, 262–263; and management guide, 257; and pilots, 237–246; of self-instruction, 249–250
- “Implementing E-Learning” (Donovan), 319
- Instructing for Results* (Margolis and Bell), 93
- Instructional design: advantages of, 7–11; checklist for, 13; definition of, 3–5, 396; disadvantages of, 11–13; overview of, 1–2; and post-class activities, 158–159; reason for, 2–3; software for, 296–297
- Instructional plan, 396; course maps for, 151; expanded outline for, 151–154; and sequencing, 154–155; training activities for, 155–159
- Instructional Systems Design (ISD), 4–5, 396; cyclic model, 4; spiderweb model, 5; straight-line model, 4
- Instructor, definition of, 5, 397
- Interviews, 54, 78; advantages of, 55; phone, 54–55
- ISD. *See* Instructional Systems Design
- J**
- Job aids, 88–89, 175–176, 398; facilitating synchronous interactions, 371; general synchronous facilitation skills, 370–371; lesson plan development, 209–211, 371; online decision, 382–383; on-the-job training, 226–227; for selecting media, 219
- Job analysis: form, 69–70; performing, 65–66; product of, 67–68; task characteristics, 60–64; template, 67–68
- Job and task analysis (JTA), 76, 322
- Job performance aids, 93, 97
- JTA. *See* Job and task analysis
- K**
- Kazanas, H. C., 76–77
- Kearsley, G., 39
- King, B., 233
- Kirkpatrick, D., 268, 271
- L**
- Langevin Learning Services, 99, 197
- LCMS. *See* Learning content management system (LCMS)
- Leading Organizational Change* (Holton), 18
- Learner: characteristics, 398; evaluation, 332–333, 337–338; guides, 327; interfaces, 333–334; preparing to be synchronous, 373; training, 372–374
- Learning: analysis, 76; effectiveness, 9; objects, 299–300
- Learning centers, 108, 250, 398; operating, 262–263
- Learning content management system (LCMS), 312–315, 399
- Learning management system (LMS), 312–315, 399
- “Learning Management Systems” (Brockbank), 315
- Lectora software, 335
- Lesson plan, 399; checklist for reviewing, 220; content, 196–201; design, 185–201; development job aid, 209–211; as end product, 185; formats, 187–188; four-column format, 188; and hand-outs *versus* pass-outs, 195; introduction, 191–192; pre-activities, 188–191; pre-tests, 194; print materials, 215–218; reviews, 208–211; scripts and storyboards for, 211–215; three-column format, 188
- Live and Online!* (Hoffman), 355

LMS. *See* Learning management system

M

Management guide, 257

Mantyla, K., 93, 180, 307

Margolis, F., 93

Marrelli, A., 21, 84

Mastering the Instructional Design Process (Rothwell and Kazanas), 76–77

Material, hints for developing, 221–236

Mentoring, 108

Message boards, 366–367

Michael Allen's Guide to E-Learning (Allen), 327

Motivation, 194

N

Needs analysis, 16

Needs assessment, 16, 400

Newstrom, J., 201–202

O

Objective checklist, 166

Objectives: behavioral, 121–123; constructing useful, 119–121; definition of, 115, 401; design, 115–130; examples of, 129; *versus* goals, 117–118; levels of, 118–119; mistakes in writing, 117–119; smart, 129–130; standards and conditions in, 123–126; use of, 115–117

Object-oriented learning, 8, 401

Observation, 81; advantages of, 57–58; disadvantages of, 57; form, 58

Off-the-shelf programs, 300

147 Practical Tips for Teaching Online Group (Hanna), 378

Online learning, 378–383, 401; advantages of, 379–380; designing, for organizations, 381–382; disadvantages of, 380; job aids, 382–383

On-the-job training, 6, 175–176, 184, 290–291, 401; beta tests, 240; delivery, 93, 95; development template, 227; facilitator, 108; job aids, 226–227; pilots, 243

“On-the-Job Training” (Gallup), 93

Operations Department Final Checklist, 165

Organization: designing online learning for, 381–382; determining readiness of, for e-learning, 309–310; preparing, globally for e-learning, 315–318

Organizational needs, 16–20, 401; assessment, 19–20; and occasional designer, 17–19; retro-assessment, 20

“Outside Services for Converting Audio and Video to the Web” (Palazzolo), 301

P

Palazzolo, M., 301

Participant's packages, 215–218; list for, 216

PBL. *See* Problem-base learning

Performance: benefits of improved, 25–26; categories and causes of poor, 27–28; checklists, 163–167, 402; gap, 21–23; interventions, 26, 402; interventions, nontraining, 25–26; opportunity, 23; questions, 172–174; support-based training, 301–302; verbs, 122

Performance analysis. *See* Performance assessment

Performance and Instruction (Marelli), 21

Performance assessment, 20–36, 402; and performance data and measurement, 25; and performance gap assessment, 21–23; and performance opportunity assessment, 23; questions, 29; and sources of performance information, 24

Performance Improvement (Brethower), 25–26

Performance Improvement Maps (Sanders and Thiagarajan), 26

Performance Improvement (Marrelli), 84

Performance intervention, 26, 402; and categories and causes of poor performance, 27–28; nontraining, 26–27; and performance assessment questions, 29; relationship of training to other, 28–29

“Performance Support Systems and Job Aids” (Williams), 93

Pike, R., 7

Pilots: in asynchronous e-learning, 334–335; *versus* betas, 242–243; considerations on, 244–245; implementation, 237–246; for on-the-job training, 243; for self-instructional programs, 243–244

Piskurich, G. M., 16, 23, 27, 93, 250, 316, 372

Planned revisions, 286

“Playing the Stock Market” (Hartnett), 229

Post-class activities, 158–159

Post-tests, 157–158, 403

PowerPoint (Microsoft), 362–363

Preparing Learners for E-Learning (Piskurich), 316

“Preparing the Learner for Self-Directed Learning” (Piskurich), 227

Pre-tests, 194

Print material: checklist for developing, 218; and participant's packages, 215–218

Problem-based learning (PBL), 303, 403

Program administration guide, 256–257

Public courses, 300

Q

Question banks, 166–167

Questionnaires, 55–56

R

Rapid prototyping, 298–299

“Rapid Prototyping” (Tripp), 229

Reaction Instruments, 274–275

Repurposing, 336–337

“Repurposing Materials for E-Learning” (*AMA Handbook of E-Learning*), 336

Return-on-investment (ROI), 36, 40, 268, 271, 280–282

Reviews, 123, 127–128; revisited, 246–248

Revisions, 286–290

Richardson, C., 336

Role plays, 225

Rosenberg, M., 308

Rossett, A., 20

- Rothwell, B., 76–77
 Ruyle, K., 40
- S**
- Sanders, E., 26
 Satellite-based training, 234–235, 265, 294, 404
 Schank, R., 323
 Scripts, 211–215
 Self-assessment, 318–319
Self-Directed Learning (Piskurich), 93, 250
 Self-directed learning plan, 323
 Self-instruction, 107–108, 176–177, 184, 227–228, 404; beta tests for, 240; delivery, 93, 95; implementation, 249–250; learning facilitator survey, 291; pilots for, 243–244; program evaluation, 282–286; reaction evaluations, 275; survey on, packages, 284–285
Selling E-Learning (Hartley), 315
 Sequencing, 154–155
 Shrock, S., 160–161
 SME. *See* Subject-matter expert
 SME-based training, 11, 60, 65, 406
 Software: analysis, 297; for asynchronous e-learning, 335–336; for instructional design, 296–297; miscellaneous, 298; test development, 297–298
 Sound, 364–365
 Stakeholder, 20
 Stewart, J., 264
 Stolovitch, H., 23, 234
 Stoneall, L., 224
 Store Manager Questionnaire, 283
 “Storyboarding Tales” (Frye), 229
 Storyboards, 211–215, 406
 Subject-matter expert (SME), 6, 7, 144, 243; selecting, 146–147; selection form, 33–34; working with, 147–148
 Surveys, 80; advantages of, 56; disadvantages of, 55–56; and net surveys, 56; self-instructional learning facilitator, 291
Sustaining Distance Training (Berge), 369
 “Synchronous Distance Learning: The Interactive Internet Classroom” (Stewart), 264
 Synchronous e-learning design, 407; advantages of, 345–346; audience analysis in, 367–369; and continuous interactions, 366–367; design considerations for, 350; difficulty of, 347–348; disadvantages of, 346, 348–349; general technology considerations for, 359–361; and getting started, 376–378; implementation, 369–378; learner guide for, 358–359; media, 361–366; and mini-interactions, 350–351; and more detailed facilitator guides, 355–359; and other synchronous activities, 352–355; repurposing and redesigning programs in, 351–352; and self-assessment of personal characteristics for, 375
Systematic Design of Instruction, The (Dick and Carey), 2
- T**
- T3 program: general, 251–253; for on-the-job training, 255–256; for self-instruction, 253–254
 Target audience, 2, 407
 Task analysis, 407; data gathering for, 72; data that may be collected during, 74; depth of, 71–72; example, 71; form, 75; questionnaire, 73
 TBT. *See* Technology-based training
Technical Training, 40
 Technology vendors, 300–301
 Technology-based training (TBT), 93, 96, 184–185, 407. *See also* Computer-based training (CBT)
 Telephonic formats, 180–181, 234–235
Test Construction for Training Evaluation (Denova), 167, 205
 Test questions, 167–168
 Testing, 167–168; formats, various, 168–172
 Thiagarajan, S., 26, 203
 “Three Rs of ROI” (*Technical Training*), 40
 Timbuktu software, 181
 Time effectiveness, 8–9
 ToolBook software, 335
 Trainee analysis (audience analysis): additional data for, 81–82; data gathering methods for, 77–78; overview, 76–77; questions (for managers and initiators), 79–80; report, 83–84; template, 80–81; and top audience characteristics, 83
 Trainee evaluation: design, 159–1746; performance checklists, 163–167; and relating test questions to objectives, 160–166
 Trainer: certification checklist, 164; computer-based, 177–180; definition of, 6; guide, sample, 185–186; manuals, 220; and on-the-job training (OJT), 6; training, 251–256
 Training: alternatives to, 18; computer-based, 177–180; documentation, 93–94; effectiveness evaluation, 9–10; granular, 299–300; management systems, 303; on-the-job, 6, 175–176; performance support-based, 301–302; satellite-based training, 180–181; setting, 92–115; value of, 47
 Training activities: and instructional games, 157; and introductions, 155–156; pre-instructional, 155; and pre-tests, 156; testing, 157; and trainee-centered activities, 156–157
 Training needs: analysis report, 36–39, 408; analysis template for managers, 32–33; assessing, 30–33; assessment questions for individual contributors, 31–32; assessment questions for management, 30–31; choosing, to address, 33–36; consideration questions, 35–36; and outline template for analysis report, 38–39; statement, 36–39; validation, 33–35
 Transfer to Job instrument, 278
 Tripp, S. D., 229
- V**
- Video, 365
 Video Shot List/Log, 235
 “Virtual Reality: Is It for You?” (Gunther-Mohr, C.), 98
- W**
- Web pages, 366
 Web-based training, 96, 326, 409

- Web-Based Training Cookbook*
(Hall), 179
- Web-Based Training: Using
Technology to Design Adult
Learning Experiences* (Driscoll),
331
- Whiteboards, 363
- Williams, S. W., 93, 367
- Withers, B., 249
- “Write Successful Video Scripts”
(Info-Line), 229

Z

- Zemke, R., 50