INDEX

A
accessibility 156
action recorder software 41
ADDIE 118, 140
ADDIE Model 89
advantages and disadvantages of the
DL technology 36
affective 15
affective domain 18
analog voice signals 146
analysis 16
analyzing and tracking 151
animation 131, 146
application 16
aspirations 18
Asymmetrix 162
asynchronous 8
asynchronous communication tools 149
asynchronous correspondence 51
asynchronous learning networks 8
audio and video limitations 76
audio conferencing 71
audio file formats 132
audio-conferencing 51
audiographic telecourses 87
authentication 69
authoring/programming 147
authorization Tools 153
autoCAD 131

B
bandwidth requirements 76, 82
behavior transfer 191
Bloom’s taxonomy 18
branching operations 26
budgeting for the DL 173
building knowledge 152
building motivation 152
bulletin boards 51, 59

C
categories of learning objectives in the
cognitive 16
CBT 27
CBT, CAI or WBT, with some telecon-
ferencing support 102
CBT, WBT, videotapes, VTT, and
teleconferencing 103
centralized result tracking 64
certification assessment 108
change management 174
characterization by a value 20
chat communication packages 59
chat rooms 49
client workstations 60
CMI 180
CODEC 83
cognitive 15, 29
collaboration software 51
collaborative environment 184
combined delivery 3, 101
Commercial Off The Shelf (COTS)
software tools 131
common and consistent interface 39
communication feedback 22
communication process 174
communication theory 21
comprehension 16
compression algorithms 130
compression factor 117
compression rate 118, 181
compute-aided instruction 44
computer access 42, 65
computer assisted instruction 8
computer conferencing 58
computer learning center 185
computer mediated education 8
computer mediated training 8
computer-aided instruction 44, 109
computer-aided learning 44
computer-aided teaching 44
computer-based instruction 25
computer-based learning 44
computer-based teaching 44
computer-based training 109
computer-controlled robotics 105
computer-mediated communication 26
conferencing systems 58
constructivism 29
continual learning 172
continuous assessment 107
Contractor Conversion Support 121
course characteristics 109, 188
course complexity 115
course developer 68
course managed Instruction 113
course managed instruction (CMI) systems 52
Course Management Systems (CMS) 113, 156
course managing 151
course map 54
course monitoring 151
course planning 151
course standardization 47
CourseInfo 164
crash recovery tools 153
creation 56
critical success factor 171

D
data conferencing 71
decision trees 26
definitions 6, 10
degree of acceptance or rejection of the instructor 18
delivery technologies 36
dependence on support personnel 85
design 94
design WBT 55
desktop teleconferencing 73
desktop videoconferencing 71
desktop/LAN requirements 184
development 95
development cost 43, 47, 48
difficulty of Revisions 80
digital 62
digital knowledge repositories 157
digital material required 68
disk space 154
distance education 8
distance teaching 8
distance training 8
distributed learning 10
distribution 55
dots per inch (dpi) 130
durability 156
dynamic updates 63, 84

e-mail 51
earned value management system (EVMS) 174
ease of Revision 43, 75
ease of Use 61, 63
effectiveness of training 126
electronic communication 67
electronic mail and listservs 56
electronic repository 183
emotions 18
emotions, perceptions, tone, aspirations, and degree 18
enterprise-wide distance learning 192
estimated return on investment (ROI) 93
evaluation 17, 95
evaluation criteria (outcome variables) 188
evaluation metrics 94
evaluation model 187
existing infrastructure 154, 184

F

face-to-face interaction 26, 74, 75
feedback 26, 41, 47, 112
feedback loops in communication 22
fidelity 21
file transfer protocol 49
five levels of evaluation 190
formative data-gathering methods 187
formative evaluation 187
four levels of evaluation 191
four major steps in conducting an ROI analysis 127
frames per second 131
free software 61
freelance conversion support 121
full motion video 131
full time conversion support 122
functional and technical capability 94
future growth 63, 64

G

geographic dependence 84
geographic independence 61, 64, 75, 79
graphic reach 84
GIF 130
GIF89a 131
granularity of the analysis 98, 99
graphic images 130
graphical user interfaces 39
graphics software 146
group discussion 112
group interaction 23
group problem solving 106, 111
group training for functional teams 106
group-based interpersonal training 106
group-based psychomotor training 106

H

hands-on work/activities 105
hardware and software platforms 92
hazardous environments 18
Help Desk support 185
Help Desk tools. 153
hierarchical 24
hierarchical environment 24
High Speed Network Connections 69
HTML converters 55
HTML Knowledge 68
hybrid delivery 52, 177
hybrid delivery mechanisms 87
hyperlinks 39, 138
hypermedia 24, 50
hypermedia advantages and disadvantages 25
hypermedia characteristics 24
hypertext 24

I

images 54
implementation 95
implementation and operational costs 70
implementation costs 76, 85
implementation phase 171
IMS (Instructional Management System) 155
Increased Communication 62, 63
increased coordination 48, 67, 85
increased overall costs 66
individual attention 47
inexpensive and easy to use implementation tools 64
inexpensive Communication Tools 62
information distribution 49
Information Service Provider (ISP) 66, 69
infrastructure investments 93
institutional characteristics 188
instructional activities 109
Instructional Consistency 179
instructional design process 142
Instructional design strategies 144
instructional effectiveness 147
instructional objective 91
Instructional strategies 95
instructional technologies 36
instructional unit 117
instructional units or modules 144
instructor involvement 31
instructor mediation 30
instructor support tools 153
instructor training 69
instructors require training 182
interaction between learners 42, 84
interaction with Instructor 83
interactions with learners 84
interactive communication properties 21
interactive multimedia course development 115
interactive multimedia instructions 36
interactive text 137
interactivity 40, 45, 135
Internet 7
Internet connectivity 184
Internet Mail 49
internet relay chats (IRCs) 59
interoperability 156

J

JPEG (joint photographic experts group) 130
JPG 130

K

Knowledge 16
knowledge 16
Knowledge transfer 191

L

Large Scale Teleconferencing Systems 72
large scale videoconferencing 71
larger scale analyses 96
learner centeredness 28, 41, 46, 61
learner characteristics 188
learner engagement 179
learner performance 107, 112
learner productivity 178
learner reaction 191
learner support tools 153
learner throughput 104
learner-instructor interaction 74
learner-learner interaction 74
learning centers 182
learning content repository 183
learning environment 67, 80
learning labs 36
learning module 117, 145
learning objective categories 15
learning objectives 14, 109, 115, 135
learning organization 155
learning outcomes 187
learning performance 32
learning retention 115
learning theories 29
Level I courseware 137
Level II courseware 137
Level III courseware 139
level of engagement 135
life cycle training costs 124
limited interaction 48
limited requirements 79
listservs 49, 51
low speed connections 65
lower training costs 192

M

managing records 151
media analysis 92
media conversion analysis 96
media conversion analysis 92
media richness 21
MIDI (Musical Instrument Digital Interface) 132
model of learning 13
modes of learning 41, 47
modularity 41, 46
motivation to learn 179
multi-curriculum courses 99
Multi-Object Oriented MUDs (MOOs
multi-user domains (MUDs) 27, 59
Multimedia Capabilities  39, 45
multimedia content development  129
multimedia development software  46
multimedia files  129

navigation 24,  53
network  60
network access costs  65
non-linear design  147

object-oriented  130
off-line work  76
ongoing cost  154
open learning  8
open learning environments  8
open university  8
operational costs  47, 75, 84
organizational impact  192
outcomes of DL  189

perceptions 18
periodic assessment  108
physical repository  183
physical risk  105
pilot  174
pilot project  93
pilot study  94
pixels  130
platform dependence  43, 48
platform independence  63, 64
playback technology  79
PNG  131
Postscript EPS  131
precision flying simulators  18
production personnel  85
project manager  175
project plan  141
prototype  174
prototype development  93, 148
psycho-motor  15,  107
quality (fidelity)  129
quality control procedure  143
quality of material  66

RAM  154
rapid course revising  151
real time  83
receiving (attending)  19
reliance on electronic communication  68
reliance on information service provider  67
remediation  111
remote access tools  153
resolution  129
resource monitoring  153
response Time.  41
Return on Investment (ROI) Analysis 124, 126
reusability  63, 156
reusable learning content.  157
reusable learning objects  32
ROI analysis  127
Sampling rate  134
scheduling  84, 85
scheduling Flexibility  42, 46, 79
search engine  26, 138
SECAM  79
security and privacy  66, 77
security tools  153
server  60, 152
shared whiteboards  51
Shockwave®  140
simulation  116
simulation equipment  18
skill sets  181
social presence Theories  21
socioculturalism  29
specialized tools or equipment  106
splines  131
stakeholders 173
standards 69
startup cost 154
storyboard 40, 45, 95, 145
strategic plan 172
subject matter expertise 103
subject matter experts (SMEs) 142, 147
summative evaluation 186
support infrastructures 70
synchronicity 26
synchronous 8
synchronous collaboration 51
synchronous communication 150
synchronous learning 27
synthesis 16

T

teaching flexibility 47
teaching strategies 36
team building 152
technical infrastructure 92, 115
technology insertion
3, 52, 100, 101, 181, 192
technology mediation 31
tele-learning 8
teleconferencing 27, 109
Telnet 49
temporal independence
41, 42, 61, 64, 79, 116
three cost modeling techniques 123
three-dimensional (3D) images 131
TopClass 161
total conversion 3, 101, 102
training 5, 9
training benefit to cost analysis 124
training infrastructures 193
two-dimensional graphics 131
types of conferencing technologies 71
types of Web-based training 51

U

Usenet 49
user group 94
user interface screens 145

user requirements 92

V

Value-Added Conversion 55
valuing 19
vectored images 131
VHS 79
video 146
video and interactive TV 185
Video clips 134
video conferencing 51, 71
video limitations 76
video tele-training 27
video teleconferencing 185
videotapes 27, 78, 109
virtual campus environment 176
virtual learning 8
virtual reality modeling language (VRML) 105
virtual university 8
viruses 65, 68
visual display limitations 85

W

Web authoring tools 56
Web browser 7
Web browsing 149
Web "chat" forums 51
Web Course in a Box 163
Web delivered courses 52
Web enhanced courses 52
Web managed courses 52
Web-based 25
Web-Based "chat" facilities 59
web-based instructional systems 8
Web-based teaching 27
web-based training 27, 109
WebCT 159
Wiener's cybernetic model of communication 22