Index

A
abstract algorithm model (AAM) 66
abstract data type (ADT) 60
abstract iterator implementation model (AIIM) 73
active learning 33
adaptation, concept of 235
advanced distributed learning (ADL) 167
agent-based communication, over Internet, 84
agent-based software framework 90
agent environment (AE) 272
aggregation portal 196
airline transport rating (ATP) 125
algorithm, definition of 59
algorithm animation (AA) 60
algorithm explanation (AE) 63
algorithms in action (AIA) 61, 64
algorithm visualization (AV) 60
a new interactive modeler for animations in lectures (ANIMAL) 61
any source multicast (ASM) 8
apparatus virtual user interface (App-VUI) 171
aptitude treatment interaction (ATI) 235
artificial intelligence (AI) 98
asynchronous BM (ABM) 20
AT&T Broadband 128
authentication manager (AM) 255
aviation education reinforcement option (AERO) 127
aviation industry 124
Aviation Industry CBT Committee (AICC) 167

B
behavior modeling (BM) 14, 15
behavior modeling, and knowledge transfer 16
Boolean model 194, 200
business aviation pilots 124

C
CAE SimuFlite 124
case-based teaching 31
click-through-rate (CTR) 44
collaborative education model 84
counter-based instruction (CAI) 182
counter-based training (CBT) 125
concept keyboards (CKs) 62
connection manager (CM) 255
constructs efficacy (EFF) 138
content management system (CMS) 166
content repository management system (CRMS) 284, 285
continuous professional development (CPD) 96, 108
cost-per-click (CPC) 44
curriculum vitae (CV) 106
cyber-terrorism, defined 129

D
data agent (DA) 272
decomposed theory of planned behavior (DTPB) 132
digital rights management (DRM) 284, 285, 286
digital signal processing (DSP) 181
digital video (DV) camera 112
discretionary access control (DAC) 288
Dunn and Dunn learning-style model 232
Dunn and Dunn learning styles 232

e
e-learning, challenges 49
e-learning courses 147
e-learning environment 197
e-learning systems 32
e-learning systems, overview 166
ease of use (EU) 138
execution/code agent (EA) 272
extended markup language (XML) 271

F
face-to-face (F2F) learning 15, 32
face-to-face BM (FBM) 20
facilitating conditions resources (FCR) 138
fed-Education mode 89
federated model 84
federation dictionary 89
Flight Safety International (FSI) 126
free ride multicasting (FRM) 11
fuzzy queries 196

G
graph theory, and RDF 289

H
holistic technology-based training models (HTBT) 127

I
IEEE Learning Technology Standards Committee (LTSC) 167
IMS Global Learning Consortium (IMS) 167
incremental probabilistic action modeling prediction method (IPAM) 104
industry structure model (ISM) 104
information and communications technology (ICT) 3, 285
information technology (IT) 252
intellectual property rights (IPR) 284, 286
intelligent tutoring systems (ITS) 99
interactive data structure visualization (IDSV) 61
Internet-based learning systems 165
Internet protocol (IP) 184

J
Java applet 207
Java Media Framework (JMF) 3
Java native interface (JNI) 187
Java virtual machine (JVM) 185
Jena API 298

K
Knowledge Far-Transfer (KFT) 19
Knowledge Near-Transfer (KNT) 18
knowledge transfer 17
knowledge transfer theories 18

L
laboratory learning objects (LLO) 173
lateral transfer 18
learning content management system (LCMS) 301
leaning management system (LMS) 301
learning-objects rights graph (LRGr) 295
learning activity diagrams (LAD) 148
learning management system (LMS) 166
learning object metadata (LOM) 103
learning objects (LOs) 166
LearningSpace™ software 129
learning style inventory (LSI) 233
learning styles questionnaire (LSQ) 233
least-squares deconvolution (LSD) 24
lecture video player/maker system 111
lecture videos 111
lecture videos, desired style of 121
lecture videos, quality of 112
location management agent (LMA) 272

M
mandatory access control (MAC) 288
metadata, varieties of 199
MIT Open CourseWare (OCW) 285
mobile agent (MA) 272
mobile agent execution environment (MAEE) 184
mobile distance learning (MDL) 269
mobile Web-based learning 269
motivation-to-e-learn variable 49, 50
multimedia multicast conferences (MMC) 2
multimedia software engineering (MSE) 153, 161
MyProgram, explanation 210

N
National Business Aviation Association (NBAA) 125
navigation agent (VA) 272
near transfer vs. far transfer 17
network capability agent (NCA) 272
non-case discussion grade (NCDG) 42

O
ONES system 194
one stop e-learning portal (ONES) 196
online asynchronous learning (OAL) 30
open digital rights language (ODRL) 286
Open Universities Australia (OUA) 87

P
perceived usefulness (PU) 133, 138
personalization learning (PL) 96
personalized CPD learning portal (Personalized-CPD) 96
positive transfer vs. negative transfer 17
problem-solving learning 34
program animation (PA) 60

Q
QoS adaptation 1
quality of service (QoS) 1

R
RDF format, encoding of learning objects 298
RDF instance generator (RIG) 295
real-time data exchange (RTDX) 187
real-time transport protocol (RTP) 3
Remotely Accessible Laboratory (REAL) 167
resource description framework (RDF) graph 284, 285
reusable learning objects (RLOs) 166
rights expression language (REL) 284, 286, 287
rights instance processor (RIP) 295
rights validation module (RVM) 295
role-based access control (RBAC) 288
role-based access control (RBAC) models 285
round-trip time (RTT) 5

S
scalable vector graphics (SVG) 156
selected, linear and definite (SLD) 289
self-consistent learning content objects (SCLO) 151
self-consistent learning object (SCLO) 149
semantic metadata 200
service agent (SA) 272
SHALEX agent 76
shareable content object reference model (SCORM) 285
shared object manager (SOM) 255
Simfinity™ technology 124
software engineering (SE) 161
software visualization (SV) 60
Statistical Program for Social Sciences (SPSS)
software 133
structured hypermedia algorithm explanation (SHA-LEX) 59
structured hypermedia algorithm explanation (SHA-LEX) system 58
structure of the learning outcome (SOLO) 127
synchronized multimedia integration language (SMIL) 271
synchronous BM (SBM) 20
system for e-learning activity management (SEAMAN) 148, 155

T
task-oriented mobile distance learning 271
task agent (KA) 272
technology-supported learning 49
technology acceptance model (TAM) 132
terminal agent (TA) 272
test maker language (TML) 149, 151, 155
theory of planned behavior (TPB) 132
tutoring system, seven stages of 210

U
unified modeling language (UML) 148, 168
UNIX™ text editor 215
usage request graph (URGr) 295
user agent (UA) 272
user document database agent (UDDA) 272
user interface (UI) 255

V
value-adding (process) system 130
vector model 201
vertical transfer 18
video I/O manager (VI/OM) 255
video quality manager (VQM) 255
video stream manager (VSM) 255
virtual digital signal processing laboratory (VDSPL) 180
virtual universities 194
virtual universities, information retrieval in 194
virtual universities, studying in 197
visual languages (VL) 147, 150, 161

W
Web-based tutor 207
WWW conference manager (WCM) 255
WWW conference server 254
WWW conference system 253
WWW conference system, proposed 253