Index

A
abilities 4, 17, 137
abstract conceptualization 65
academic policies 204
accountability and evaluation 258
Accreditation Board for Engineering and Technology 126
ACTIONS mode 206
active engagement 114
active experimentation 65
active learning 82
ADDIE 107
administrative issues 5
adult education principles 25
adult learning 258
adult learning principles 56, 58, 163
adult learning theory 5, 108
advance CIP models 40
Advance Research Project Agency (ARPA) 169
affective 120, 156
affective domain 122
agricultural education FFA organization 46
ALT tag 187
American Journal of Distance Education 27
American Psychological Association (APA) 152
analogue videoconferencing 168
analogue vs. digital video 191
anchors 5
andragogy 58
animation 24, 182, 196, 197
Apple 186
assessment 147, 154
assessment criteria 157
assessment tools 4
asynchronous 4, 20, 80
attrition rate 77
audio 182, 188
audiovisual media 163
authentic assessment 150, 153, 155
automaticity 41

B
behavioral 156
behavioral anchors 5
behavioral learning theory 38
behavioral theorists 106
behavioral theory 50
behaviorism 36, 50, 51
Behaviorist Learning Theory 106
behaviorist models 34
behaviorist principles 107
behaviorists 47
Berne Convention 219
best practices 230, 232, 236
best practices for distance education 237
biological intelligence 46
bitmap (BMP) 183
Index

blogging 151
bridging 212
browsers 2
budgeting/staffing 258

C
cable modems 2
case-based learning environments 109
Chen’s model for theory-driven evaluation 239
CIP model 39, 45, 46
CIP theory 45
CIPP (Context, Input, Process, Product) 206
CIPP evaluation model 249
CIPP model 237, 238
cognitive 70, 120, 156
cognitive apprenticeships 109
cognitive controls 69
cognitive domain 120
cognitive information processing 38, 39, 50, 51
cognitive information processing (CIP) memory mode 40
cognitive levels 82
cognitive maps 46, 132
cognitive models 34
cognitive styles 67, 69, 71, 72
coherence 152
collaborative and individual learning 155
communications skills 5
communications technologies 151
comparison of generative/supplantive strategy 136
compatibility 18
Competence Motivation Theory 90
competencies 3, 5, 137
competency model 4
competency-based behavioral anchors 5
complexity 18
compressed video 168
computer-assisted instruction models 107
concept mapping 112
concept maps 112
concrete experience 65
cone of Experience 163, 164
confirmatory feedback 157
Constructivist Learning Theory 108
course 203
course/program management 258
critical 120
critical or creative thinking 109
creative thinking 109
creative thinking skills 155
crystallized 70
crystallized and fluid intelligences 70
crystallized vs. fluid 72
cyclical redundancy check (CRC) 172

D
delivery methods 5
delivery strategies 77, 80, 125, 198, 258
delivery technology 162
desktop videoconferencing 151, 165, 168, 178
destination address 171
diffusion 18
diffusion of innovation 18
Digital Millennium Copyright Act 220
digital video (DV) 40, 191
distance education 2, 17, 19, 20, 25, 27, 32, 57, 82, 91
distance learners 2
distance learning 77
distributed networking 46
domain name servers 174
domains of learning 120, 129, 130
Dunn and Dunn’s model 67

E
e-mail servers 175
educational philosophy 17, 26
educational technologies 178
educational trends 254
emitted responses 37
encoding 44
engagement 80, 93
episodic 45
episemology 33
evaluation models 237
extrinsic motivation 91
eyeball cameras 168

F

face-to-face 82
faculty policies 204
faculty viewpoint 260
fair use 218
fair use guidelines 204
feature analysis 42
feature recognition 42
feedback 111, 156
fiber optics 2
field dependence 72
firewalls 173
fiscal policies and budgeting 204
fluid 70
focal point 185
formative assessment techniques 148
frame type or length 172
future trends 253

G

Gagné’s nine events of instruction 136
Gagné’s theory 136
Gestalt theory 108
global information systems 21
global television 21
globalization 20, 21, 27
good practices in distance education 232
graphic design 5
graphic interchange format (GIF) 183
graphics 182
Grow’s SSDL model 90

H

H.320 specifications 167
H.323 specifications 167
haptic 72
high attrition 78
high-speed videoconferencing 168
higher order 120
higher-order thinking 128
HOTS (higher-order thinking skills) 122
HTML 195
HTML coding 187
HTML files 199
hub or switch 173

I

icebreakers and openers 136, 139
IEEE 171
independence 72
inductive reasoning 64
information and communication technolo-
gies 22
information technology 20, 151
innovation 18, 19
innovation-decision process 18
inputs 239
instant messaging (IM) 151
instructional 163
instructional design 5, 38, 258
instructional design model 106, 107
instructional materials 5
instructional objectives 127
instructor directed 147
instructor-centered philosophy 159
intelligences 70
interaction 35, 80
interactive media 204
interactive technologies 158
interactive video 2
interactive/compressed video (ITV) 80
International Data Corporation 17
International Telecommunications Union
(ITU) 167
Internet 2, 175
Internet connection 26
Internet protocol (IP) 169
Internet protocol (IP) addresses 2
Internet protocol (IP) conferencing 80
Internet protocol (TCP/IP) 171
Internet service providers 22
<table>
<thead>
<tr>
<th>Term</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>intrinsic motivation</td>
<td>91, 101</td>
</tr>
<tr>
<td>ITV</td>
<td>168</td>
</tr>
<tr>
<td><strong>J</strong></td>
<td></td>
</tr>
<tr>
<td>joint photographic experts group (JPEG or</td>
<td>183</td>
</tr>
<tr>
<td>JPG)</td>
<td></td>
</tr>
<tr>
<td>JPG</td>
<td>183</td>
</tr>
<tr>
<td><strong>K</strong></td>
<td></td>
</tr>
<tr>
<td>knowledge</td>
<td>4, 17, 110, 137</td>
</tr>
<tr>
<td>Kolb’s Learning Styles Inventory</td>
<td>65, 72</td>
</tr>
<tr>
<td><strong>L</strong></td>
<td></td>
</tr>
<tr>
<td>LANs, MANs, and WANs</td>
<td>169</td>
</tr>
<tr>
<td>layout of graphics</td>
<td>184</td>
</tr>
<tr>
<td>learner achievement</td>
<td>35</td>
</tr>
<tr>
<td>learner motivation</td>
<td>23</td>
</tr>
<tr>
<td>learner satisfaction</td>
<td>35</td>
</tr>
<tr>
<td>learner self-directedness</td>
<td>93</td>
</tr>
<tr>
<td>learner temperament</td>
<td>77</td>
</tr>
<tr>
<td>learner viewpoint</td>
<td>258</td>
</tr>
<tr>
<td>learner-centered</td>
<td>19, 100, 102, 108, 137</td>
</tr>
<tr>
<td>learner-centered approaches</td>
<td>60</td>
</tr>
<tr>
<td>learner-centered assessment</td>
<td>146</td>
</tr>
<tr>
<td>learner-centered instruction</td>
<td>5, 32, 84, 101, 102, 104, 136, 151</td>
</tr>
<tr>
<td>learner-centered instructional strategies</td>
<td>114</td>
</tr>
<tr>
<td>learner-centered philosophy</td>
<td>159</td>
</tr>
<tr>
<td>learner-to-content</td>
<td>35</td>
</tr>
<tr>
<td>learner-to-content interactions</td>
<td>81</td>
</tr>
<tr>
<td>learner-to-instructor</td>
<td>35</td>
</tr>
<tr>
<td>learner-to-instructor interactions</td>
<td>81</td>
</tr>
<tr>
<td>learner-to-learner</td>
<td>35</td>
</tr>
<tr>
<td>learner-to-learner interactions</td>
<td>81</td>
</tr>
<tr>
<td>learner-to-technology</td>
<td>35, 81</td>
</tr>
<tr>
<td>learner’s stage of dependence</td>
<td>85</td>
</tr>
<tr>
<td>learning</td>
<td>32, 48, 71</td>
</tr>
<tr>
<td>learning contracts</td>
<td>60</td>
</tr>
<tr>
<td>learning domain</td>
<td>156</td>
</tr>
<tr>
<td>learning goals</td>
<td>110</td>
</tr>
<tr>
<td>learning objectives</td>
<td>157</td>
</tr>
<tr>
<td>learning strategies</td>
<td>109, 110</td>
</tr>
<tr>
<td>learning style</td>
<td>20, 140</td>
</tr>
<tr>
<td>learning theories</td>
<td>31</td>
</tr>
<tr>
<td>leveraging</td>
<td>212, 213</td>
</tr>
<tr>
<td>lifelong learner</td>
<td>263</td>
</tr>
<tr>
<td>lifelong learning</td>
<td>25</td>
</tr>
<tr>
<td>local area networks (LANs)</td>
<td>170, 171</td>
</tr>
<tr>
<td>long-term memory</td>
<td>39, 133</td>
</tr>
<tr>
<td>lower-level thinking</td>
<td>121</td>
</tr>
<tr>
<td><strong>M</strong></td>
<td></td>
</tr>
<tr>
<td>Macintosh environment</td>
<td>186</td>
</tr>
<tr>
<td>MANs</td>
<td>171</td>
</tr>
<tr>
<td>medium-speed videoconferencing</td>
<td>168</td>
</tr>
<tr>
<td>memory</td>
<td>43, 134</td>
</tr>
<tr>
<td>mental abilities/intelligences</td>
<td>72</td>
</tr>
<tr>
<td>metacognition</td>
<td>154</td>
</tr>
<tr>
<td>metaphors</td>
<td>186</td>
</tr>
<tr>
<td>mnemonic devices</td>
<td>44</td>
</tr>
<tr>
<td>mobile Internet access</td>
<td></td>
</tr>
<tr>
<td>model of instruction</td>
<td>36</td>
</tr>
<tr>
<td>modeling</td>
<td>47</td>
</tr>
<tr>
<td>models of learning</td>
<td>33, 34, 93</td>
</tr>
<tr>
<td>modems</td>
<td>22</td>
</tr>
<tr>
<td>motivation</td>
<td>142</td>
</tr>
<tr>
<td>motivation theory</td>
<td>141</td>
</tr>
<tr>
<td>MPEG</td>
<td>170</td>
</tr>
<tr>
<td>multi-area evaluation</td>
<td>204, 205</td>
</tr>
<tr>
<td>multimedia</td>
<td>24, 182, 196, 258</td>
</tr>
<tr>
<td>multimedia design</td>
<td>182</td>
</tr>
<tr>
<td>municipal area networks (MANs)</td>
<td>170</td>
</tr>
<tr>
<td><strong>N</strong></td>
<td></td>
</tr>
<tr>
<td>National Commission of Excellence in</td>
<td>147</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>NCES</td>
<td>178</td>
</tr>
<tr>
<td>needs assessment</td>
<td>204</td>
</tr>
<tr>
<td>negative reinforcement</td>
<td>37</td>
</tr>
<tr>
<td>network interface cards (NICs)</td>
<td>172</td>
</tr>
<tr>
<td>network management servers</td>
<td>174</td>
</tr>
<tr>
<td>network operations center (NOC)</td>
<td>174</td>
</tr>
<tr>
<td>numeric ability</td>
<td>64</td>
</tr>
<tr>
<td><strong>O</strong></td>
<td></td>
</tr>
<tr>
<td>object-oriented software</td>
<td>46</td>
</tr>
<tr>
<td>objective writing</td>
<td>127</td>
</tr>
<tr>
<td>observability</td>
<td>18</td>
</tr>
<tr>
<td>observable action</td>
<td>127</td>
</tr>
</tbody>
</table>
one-way live video 165, 166
online instruction 155
online learners 257
online learning 57
OPTIMAL strategies 90
OPTIMAL strategies model 90

P

Palmtops 257
pattern recognition 42
patterns of engagement 23
payload 172
pdf documents 199
pedagogical anarchy 34
perceptual speed 64
personalized messages 157
PERT charts 210
Pew Learning and Technology Program 19
philosophy of education 16, 19, 22
policy issues 209
portable network graphic (PNG) 183
portfolio 154, 155
Preamble 171
primary distance-source learners 223
principles of adult education 52
principles of adult learning 72
principles of good practice 235, 236
problem-solving 108
processes 239
products 239
professional competencies 4
program evaluation 236, 247
program management 203
project-based learning 109, 153
prototype 42
psychomotor 120, 129, 156
psychomotor domain 123

Q

quantum-bit computing 46
Quarterly Review of Distance Education 254

R

rate of adoption 18
rate-shaping devices 174
reflective observation 65
rehearsal 44
relative advantage 18
resolutions 185
retrieval 137, 138
routers 173

S

satellite systems 22
scalene triangle 128
SCenTRLE 110, 114, 138
SCenTRLE model 111, 138
schema 112
script 193
secondary distance-source 224
self, peer, and expert assessments 111
self-assessment instrument 60
self-assessments 92
self-concept 60
self-directed 25, 58, 265
self-directed approaches 100
self-directed learning 83, 89, 100
self-directedness 23, 76, 88, 258
self-direction 69, 79
self-reflection 154
semantic encoding 137
semantic memory 45
sequencing 134
shaping 37
Sharable Content Object Reference Model (SCORM) 135
short-term 43
short-term and long-term memory 50
short-term memory 39
Simple Network Management Protocol (SNMP) 175
simulations 183, 196, 197
situated cognition 47, 49
situated cognition/social learning theory 51
situated learning 47
skills 4, 17, 137
Skinner 36
Skinner’s black box metaphor 39
Skinner’s model 37
SMART 119
social learning theory 47, 49
source address 172
Southern Regional Education Board (SREB) 235
spatial orientation 64
speech recognition 257
SREB 236
Staged Self-Directed Learning Model (SSDL) 84
streaming video 80, 192, 194
synchronous 4, 20, 80
synchronous interactions 83
synchronous technology 165
systematic instructional design 4, 99, 231, 265

T
tactile and affective domains of learning 23
TCP/IP protocol 170
teacher-centered instruction 104
technological advances 256
technological knowledge/skill 5
telecommunication protocols 158
telecommunications 2
template 42
theories of learning 38
theory of andragogy 93
Thorndike 36
threaded discussions 158
three Ps 151, 154
training and development viewpoint 261
transcript 193
transmission control protocol (TCP) 169
trash can 186
trialability 18
two-way audio 165
two-way live audio 165
two-way live video 165

V
verbal ability 64
verbal memory 64
video 182, 191
videoconferencing 24, 168
visual 72

voice recognition software 257

W
WANs 171
WASC 236
Web browsing 170
Web-based courses 24
Web-Based Education Commission 177
Web-based instruction 175, 176
Web-based instructional delivery methods 177
Web-based tracking simulations 24
Web-supported instruction 176
Western Association of Schools and Colleges (WASC) 234
Western Cooperative for Educational Telecommunication 224, 232
Western Interstate Commission for Higher Education 232
WICHE 236
WICHE guide for Good Practices in Distance Education 249
wide area networks (WANs) 170
wire plant 172
wireless technology 257
working memory 43
World Wide Web (WWW) 2, 169, 175
World Wide Web Consortium’s (W3C) 187
Wrist-top computers 257