

Index

3D Environments 324

A

ABET's - See Accreditation Board for Engineering and Technology.
 AcademicBenchmarks (AB) 177
 Accreditation Board for Engineering and Technology (ABET's) 66
 Adaptive Structuration Theory (AST) 345, 351
 African Virtual University (AVU) 336, 341-342
 AI - See Artificial Intelligence.
 AIS - See Association for Information Systems.
 American Nursing Association (ANA) 232
 ANA - See American Nursing Association.
 AR - See Augmented Reality.
 Artificial Intelligence (AI) 100, 125-129, 136-138
 Association for Information Systems (AIS) 25, 64, 67, 76, 90, 292
 AST - See Adaptive Structuration Theory.
 Asynchronous CMC 346-349
 Augmented Reality (AR) 322, 325, 327-330

B

B2E - See Business to Educators.
 Balanced Emotional Empathy Scale (BEES) 81
 Bayesian Networks 126, 129, 136-137
 BBS - See Bulletin Board System.
 BEES - See Balanced Emotional Empathy Scale.
 BL - See Blended Learning.
 Blackboard 13-14, 196, 231, 284, 346-347, 349
 Blended Learning Approach 326, 328
 Blended Learning (BL) 112-116, 118-124, 194, 200-201, 265, 323, 326, 328-330, 346, 350
 Bulletin Board System (BBS) 207, 215
 business law 1-3, 5-7, 9, 124
 Business-To-Educators (B2E) 270

C

campus safety department 95-97
 CAR - See Computer Anxiety.
 CAS - See Content Area Specialist.
 cataloging 165-166, 168-173, 175-178
 CEMARC - See Curriculum-Enhanced MARC
 Center for International Environmental Law (CIEL) 336
 CFA - See Confirmatory Factory Analysis.
 CFI - See Comparative Fit Index.
 CIEL - See Center for International Environmental Law.
 CIS - See Computer Information Systems.
 CMC - See Computer-Mediated Communication.
 CMS - See Course Management System.
 cognitive skills 218-221, 224-225
 communication 4, 9, 16-18, 20, 25-27, 30, 35, 38, 42, 52-53, 60, 64, 66, 69, 77, 91, 95, 101-102, 104-109, 111, 114, 123-125, 128, 131-132, 138, 149, 164, 170, 178, 180, 182-183, 188, 190-191, 195-196, 198, 202-204, 206-208, 210, 215-217, 229-230, 232, 234, 240, 243, 248, 252-256, 258, 262, 265-268, 270-272, 274-275, 278, 280-281, 292, 294-295, 303-304, 316, 319, 322, 329-331, 337, 341-347, 350-353, 355, 358, 364, 366-370
 communication tools 102, 104-109, 258, 347, 351
 Comparative Fit Index (CFI) 144, 288
 Computer Anxiety (CAR) 140-141, 148, 305-307, 309-319
 Computer Attitudes Scale (CAS) 139-147, 175
 Computer Information Systems (CIS) 66, 76, 78-89, 229, 309, 316-317
 Computer-Mediated Communication (CMC) 343-355
 Computer Self-Efficacy (CSE) 140, 283, 291, 305-319, 367
 constructionism 93-94, 101, 182

Index

constructivism theory 203, 205, 215
Content Area Specialist (CAS) 139-147, 175-176
course design 2, 113, 195, 197, 203, 205-209, 214-216, 352
Course Management System (CMS) 17-21
course orientation 112, 114-116
critical care nursing 231-233, 235-237, 239-240
CSE - See Computer Self-Efficacy.
curriculum designers 218
Curriculum-Enhanced MARC (CEMARC) 168-171, 178

D

D3A2 - See Data Drive Decisions for Academic Achievement.
Database Management System (DMS) 95-96, 112, 114-116
Data Drive Decisions for Academic Achievement (D3A2) 173-174, 178
data mining 74-75
data warehouses 74-75
DBT - See Digital Bridge Institute.
decision function example 133
developing countries 67, 75, 204, 306, 308, 316, 330-331, 342
developing economies 331, 336-337
diffusion of innovation 356, 359, 366, 369
Digital Bridge Institute (DBT) 53, 60
digital storytelling 179-191
Digital Video (DV) 16-21, 24, 26, 47, 185, 252, 254
DMS - See Database Management System.
document retrieval 165
DV - See Digital Video.

E

E2B - See Educators-to-Business.
E2C - See Educator-to-Consumer.
E2E - See Educator-to-Educator.
EAs - See Evolutionary Algorithms.
Ease of Learning (EOL) 16-17, 19, 25, 218, 220-222, 224-226
Ease of Use (EOU) 16-17, 19, 25, 93, 147, 260, 283-285, 288-289, 291
E-Business - See Electronic Business.
Educational Resource Services (ERS) 171-173, 176, 178, 242
educational technology 8, 43-47, 49, 51-52, 100-102, 104, 110-111, 122-124, 137, 146, 149-150, 162, 169, 173, 176-177, 179, 201-202, 216, 243-245, 266, 279, 281-282, 292-293, 303-304, 330, 352, 368

educational technology integration 150, 179
educational tools 182, 356
Educators-to-Business (E2B) 270
Educator-to-Consumer (E2C) 270
Educator-to-Educator (E2E) 270
E-Learning - See Electronic Learning.
E-Learning Platforms 131-132
Electronic Business (E-Business) 74-75, 316
Electronic Learning (E-Learning) 66, 113, 116, 120-134, 136-138, 168, 192, 200-201, 203, 217, 265-266, 268-272, 274, 278, 280, 285, 326, 329, 347, 352-353, 356, 368
EOL - See Ease of Learning.
EOU - See Ease of Use.
evaluation 2, 4, 19, 29, 31-35, 37-38, 40-42, 44, 47, 67, 92, 94-95, 100-102, 105, 107-108, 111, 113, 115, 118, 123, 149, 166, 170-171, 175-177, 195, 198, 203, 208, 216, 218, 223, 255, 293, 296, 327, 329, 351, 365-366, 369
Evolutionary Algorithms (EAs) 126, 131-134, 136
execution module 131-133
exploratory study 90, 124, 150, 257

F

F2F - See Face-to-Face.
Face-to-Face (F2F) 8, 113-114, 118, 121, 123, 194, 204, 210, 268, 270, 323, 326, 344-346, 352-353
faculty 2, 5, 8-9, 18, 20, 27, 29, 31-38, 40-42, 46, 54, 68-70, 80-81, 87-90, 102-110, 124, 190, 192-202, 228, 231-235, 237-242, 255, 258, 264, 267, 271, 275, 292, 323, 334, 351, 356-369
faculty adopters 356, 358, 364
faculty teaching 2, 29, 31-33, 36-38, 41-42
Free/Libre and Open Source Software for Education (FLOSS4EDU) 333

G

gender perception 305-306, 308-309, 311-315
Gender-Typing Scale (GTS) 309-314, 318-319
global IT 305-306
GTS - See Gender-Typing Scale.
HCI - See Human-Computer Interaction.
higher order cognitive skills 221
HTML - See Hypertext Markup Language.
Human-Computer Interaction (HCI) 92, 94, 101
Hypertext Markup Language (HTML) 8, 52, 93-95, 97, 110-111, 117, 124-125, 137, 161-162, 174, 178, 190, 229, 265, 280, 317, 330, 340-342, 351, 367

I

IEEE - See Institute of Electrical and Electronics Engineers.

Information Technology (IT) 2, 7-8, 18-19, 21-22, 24-26, 29-30, 32-37, 40-41, 44-47, 49-54, 56, 58, 64-70, 72, 74-80, 82-83, 87-89, 92-97, 100, 103, 106, 109-110, 112-116, 118-122, 124, 126-127, 129-133, 135-137, 139-140, 145-148, 151, 154-155, 157, 159-163, 165-173, 175-177, 181, 184-185, 187, 189-190, 192-195, 197-201, 204-209, 212, 214-216, 218-223, 225-242, 244, 254-260, 262-264, 268-271, 274-276, 278-279, 282-285, 287-293, 295-303, 305-312, 314-317, 320-330, 332, 334-337, 339-341, 343-346, 348-351, 353, 356-359, 364-367, 369

Institute of Electrical and Electronics Engineers (IEEE) 123, 128, 137, 168, 178, 228-230, 328, 330, 340

Instructional Quality Scale (I.Q.) 107-108

instructional technology 2, 38, 44-46, 49, 51, 102, 104, 110, 139, 150, 162, 166, 191, 194-195, 200, 202, 216, 255, 265, 304, 323, 368

intelligent agents 126, 128, 137

Intelligent Tutoring System (ITS) 16-17, 21-22, 30, 36, 43, 66-67, 69, 73, 82, 90, 92-94, 96-98, 100, 102, 104, 106, 108, 113, 123, 126-128, 134-135, 138-141, 144, 157, 160, 165, 168-171, 174, 177, 179, 181, 183, 189, 197, 201, 206, 219, 221, 232, 245, 253, 257-258, 260, 269, 271-272, 276, 284, 286-288, 290, 295, 297-298, 304, 315, 324-325, 332-337, 339-341, 344-345, 350-351, 356, 359, 364, 367

international distance education 203-204, 215

International Society for Technology in Education (ISTE) 43-46, 48, 51, 103, 110, 151, 162, 178, 185, 193, 201, 245, 255, 265

IPCop firewall 298-299

iPods 44, 356, 367, 369

I.Q. - See Instructional Quality Scale.

ISTE - See International Society for Technology in Education.

IT industry 80, 307, 309

ITS - See Intelligent Tutoring System.

IT Workforce 305, 309

L

language barrier 204, 215

LAS - See Library Automation System.

learning object 166-170, 174, 178, 193-194

librarian's role 165

Library Automation System (LAS) 175-176, 367

low income countries 331

M

materials-to-standards alignment 165-166, 168-171, 176

math education 150-152

media in education 112

Microsoft Office Specialist (MOS) 112

M-Learning - See Mobile Learning

Mobile Learning (M-Learning) 268-281

models repository 131, 133

Moodle 13-14, 118, 124, 298, 300

MOS - See Microsoft Office Specialist.

multimedia case studies 218, 220-221, 226, 228

N

National Council for Accreditation of Teacher Education (NCATE) 45, 52

National Education Technology Standards (NETS-T) 43-44, 46-51

NC - See No Credit.

NCATE - See National Council for Accreditation of Teacher Education.

NCC - See Nigeria Communication Commission.

NCLB - See No Child Left Behind.

NETS-T - See National Education Technology Standards.

Network Administration (Project) 296, 302

NGO - See Non-Governmental Organization.

Nigeria 29, 33, 37, 41-42, 53-56, 58, 60-61

Nigeria Communication Commission (NCC) 53-54, 60

No Child Left Behind (NCLB) 43, 165

No Credit (NC) 41, 300

Non-Governmental Organization (NGO) 335, 337

Non-IT Majors 218, 222

Northwest Ohio Educational Technology Foundation (NWOET) 169, 173, 176-177

NWOET - See Northwest Ohio Educational Technology Foundation.

O

OER movement 334

Ohio Alignment Concept 166

online instruction 1-5, 7-8, 10-11

online problem-solving 112, 120

online public access catalog 165

Index

Open Education Repository (OER) 333-334, 336, 340

oral presentation 16-18, 20, 24

P

Partial Least Squares (PLS) 21, 25-27, 291

pedagogical issues 112, 264

pedagogy 1-2, 8, 38, 92, 100, 110, 165, 192-201, 227, 230, 242, 279, 292, 357, 364, 368

perceived improvement in learning concepts 220-221

PLS - See Partial Least Squares.

PLS analysis 21

podcasting 356-361, 363-370

presentation tools 102, 104-109

preservice teachers 43-47, 49-52, 103-104, 161-162, 228

priceCode 177

problem based learning 303

productivity tools 102, 104-109

professional development 30, 150-154, 159-162, 173, 192-193, 196, 202, 232, 244, 246-247, 252-254, 265, 289, 347

public speaking 16, 20

Q

Questionnaire for User Interaction Satisfaction (QUIS) 92, 94-95, 98, 101

QUIS - See Questionnaire for User Interaction Satisfaction.

R

recruitment 78

regret 78-79, 82-84, 86-90

request decision module 132-133

research methodology 29, 31-34, 36-38, 40-41, 65, 69, 84, 272

resource-based learning 64, 66, 76-77

retention 78-79, 82-83, 86-87, 89-90, 143, 350

RMSEA - See Root Mean Square Error of Approximation.

role categories 1, 3-5

Root Mean Square Error of Approximation (RMSEA) 144, 288

routine repository 132-133

rule optimization module 127, 132-134

rule processes repository 131-133

S

satisfaction 1-13, 78-79, 81-90, 92, 94-95, 100, 123, 321, 352, 356, 359, 361, 363, 366

scale up quadrant 338-339

scale validation 139

Open Education Repository. 333-334, 336, 340

SEFP - See Student Evaluations of Faculty Performance.

self-efficacy 81, 140, 218-222, 224-225, 227, 229, 283, 291, 305-309, 311-317, 359, 367

SETE - See Student Evaluations of Teaching Effectiveness.

Singapore 66, 139, 141, 145-149, 257, 259, 261, 282, 285, 292, 329

SIP - See Social Information Processing Theory
Social Information Processing Theory (SIP) 345

soft skills 219-221

SRMR - See Standardized Root Mean Residual.
Standardized Root Mean Residual (SRMR) 144, 288

Student Evaluations of Faculty Performance (SEFP) 32

Student Evaluations of Teaching Effectiveness (SETE) 32

student learning 4, 18, 43-45, 48, 51-52, 102-104, 108-110, 123, 185, 193, 195, 198, 200-201, 223, 232, 242, 244-245, 254-255, 328, 351

student model agent 126-127, 130-133

student questioner reasoning module 129

Synchronous CMC 346-348

systems analysis and design 75

T

TAM - See Technology Acceptance Model.

Task Match (TM) 16-17, 19, 25

Task Technology Fit (TTF) 16-17, 19, 23-24, 26

TCO - See Total Cost of Ownership.

Teacher Education in Sub-Saharan Africa (TESSA) 333

teacher preparation 44-46, 103, 151, 161, 183, 292

teaching 1-5, 7-9, 15, 25-26, 29-38, 40-42, 44, 47-48, 50-54, 58, 60, 66, 69-70, 74-77, 79, 81, 88, 94-95, 98, 108-109, 113-116, 118, 121, 123-124, 128, 139, 150-153, 155-163, 165, 167-169, 171, 177, 179-183, 186, 189-222, 224, 227, 229-235, 237-248, 250, 252, 254, 258, 265, 270, 282, 285, 289-290, 292-293, 295-296, 298-300, 302-304, 321, 323-330, 336, 347, 351-352, 356, 358-360, 364-367, 369

teaching and learning systems 203
 teaching business law 1-2
 team working skills 218, 221-222, 225-227
 Technology Acceptance Model (TAM) 16, 147, 149, 282-286, 288-293
 technology competencies 43-45, 48, 51
 technology integration 46, 50-51, 102-104, 110, 150-151, 153, 155-156, 158-159, 179, 184, 192, 196, 198-199, 201, 232, 244, 253-256, 290, 359, 368
 technology standards 43-46, 48, 51, 110, 162, 168, 178, 201
 technology training 44, 53, 192, 195-197, 200-201, 230, 246-248
 TESSA - See Teacher Education in Sub-Saharan Africa.
 think big 331, 335, 337-339
 TLI - See Tucker-Lewis Index.
 TM - See Task Match.
 Total Cost of Ownership (TCO) 336, 342
 traditional classroom instruction 2, 4, 10, 12-13
 TTF - See Task Technology Fit.
 TTF model 16, 23-24
 Tucker-Lewis Index (TLI) 144, 190
 Turkey 64-66, 69-70, 72, 74-75, 240, 243, 334

U

undergraduate students 29-30, 37, 109, 188, 321
 user-centricity 126
 user modeling 126-127, 129-130, 137-138

V

virtual classroom 216-217, 280
 virtualisation 295
 virtual machines 295, 297
 Virtual Reality (VR) 270, 322, 324
 VISTA 13-14, 18, 20
 VR - See Virtual Reality.

W

WATS - See Weekly Automated Assessment Scheme.
 web-based interactions 165
 Web-based Training(WBT) 206-207, 215, 270, 346, 352
 WebCT 18, 20, 140, 196, 263, 292, 346-347, 349
 Weekly Automated Assessment Scheme (WATS) 326
 world wide web tools 102, 104-109