

Index

Symbols

3D Modeling in Second Life 66

A

“active” lecture environment 76
 academic knowledge 56
 access control 99, 106
 access control systems 107
 accurate user identification 100
 active learner engagement 254
 active learning 24
 active worlds learning environment 57
 ADDIE (Analysis, Design, Development, Implementation, and Evaluation) model 234
 Anglia Ruskin Computing (ARC) 62
 Art of Illusion 66
 assessment 1
 assessment, types of 5
 assessment of learning 91
 assessment practices, formative 76
 assessment practices, summative 76
 assessment tasks 79
 association 60
 asynchronous online quizzes 87
 audacity 66
 audience response system 76, 80, 82
 audience response system, general pedagogical issues 87
 audience response system, integration of 86
 audience response system, limitations of 85
 audit 108
 AWEDU 57

B

‘blended’ technologies 89
 Biology Bridging Program 41
 biometric systems 104
 biometric technologies 102
 blended e-learning 58
 breadth discovery 8

C

case-based teaching 22
 case-based teaching approach 20
 Center for Technology in Education (CTE), The 247
 change, drivers for 77
 co-operative learning 24
 cognitive skills/alignment 78
 collaboration 51
 collaborative e-learning 37
 collaborative idea generation 155
 collaborative knowledge 24
 collaborative learner engagement, assessing the efficacy 256
 collaborative learner engagement, practical strategies for 254
 collaborative learning 39
 collaborative learning, peer assessment 40
 collaborative learning tasks 22
 collaborative projects 37
 collaborative wiki 46
 communication 60
 communication, flexibility of 122
 communication, speed of 122
 community 71

computer-mediated 255
 computer-mediated conferencing 61
 computer-networked 254
 computer-networked education 255
 computer-networked learning environments 255, 256
 computer-networked settings 254
 computer-supported collaborative learning (CSCL) 255
 computer assisted assessment (CAA) 99
 computer science courses 153
 computer science courses, analysis of undergraduates 153
 computer technologies 155
 consequential validity 3
 constructive learning 24
 constructivist 55
 construct validity 3
 contemporary learning environments 218
 content attainment approach 78
 content delivery 55
 content validity 3
 conversational learning 24
 conversation logging tools 62
 corporate learning 137
 creativity 59
 criterion-related validity 3
 critical thinking skills 22, 76
 Cronbach's Alpha correlations for learning style 159
 CSCL efficacy 262
 CSRs 240

D

"distance learning" courses. 255
 "distance learning" students 255
 data integrity mechanisms 105
 Deakin University psychiatry units 109
 denial of service (DoS) attacks 98
 depth discovery 8
 DIF analysis 196
 differential item functioning 195
 digital immigrants 121
 digital natives 121
 digital portfolio 244, 245
 digital rights management (DRM) 107

digital signature 106
 digital signature generation 105
 digital video (DV) 22
 discussion forum 62
 distance education, postgraduate program 243
 document management system 106

E

e-assessment 97
 e-learning 1
 e-learning (EL), empirical assessment of 151
 e-learning, collaborative 37
 e-learning, educational design for 41
 e-learning, influence on validity and reliability 11
 e-learning, innovative approaches to 76
 e-learning, issues in peer assessment 117
 e-learning, management and administration challenges 128
 e-learning, pedagogical challenges 127
 e-learning and assessment, implications for 208
 e-learning and peer assessment, future of 129
 e-learning community, developing the 46
 e-learning course 20
 e-learning courses, computer science and humanities 151
 e-learning courses, validation of 151
 e-learning environment 1, 6
 e-learning environment, assessing group learning in 139
 e-learning environment, reassessing validity and reliability 1
 e-learning environment, stimulating group learning 137
 e-learning environments 117, 218
 e-learning environments, functionalities 120
 e-learning environments, implications for group learning 146
 e-learning environments, self-and-peer assessment tool 170
 e-learning environments, users 121
 e-learning for formative and summative assessment 77
 e-learning for peer assessment, challenges of 127

Index

e-learning for peer assessment, opportunities 122
e-learning group dynamics 136
e-learning in higher education institutions 86
e-learning model, levels and tasks 62
e-learning program 38, 244
e-learning settings 23, 136
e-learning settings, proxy for individual learning 136
e-learning strategies, holistic 59
e-learning students, cohort of 195
e-learning technologies 56, 76
e-learning technologies, traditional use of 58
e-learning technology, transformative use of 58
e-learning tools 117
e-learning tools, functionalities 120
e-portfolio xv, 243
e-portfolio, definition 245
e-portfolios, integrated 248
e-portfolios, learning 246
e-portfolios, showcase 246
e-portfolios, structured 246
e-portfolios, types of 246
e-settings 254
educational assessment devices 1
educationally oriented 13
effectiveness evaluation 236
electronic content origination (IECO) module 66
electronic delivery 1
electronic information exchange system 152
electronic mediation 10
electronic portfolio (EP) 247
emotions generated by the course, student perspective 29
encoding 224
engagement, level and nature of 65
ethics 250
evaluation functions 235
evaluation pyramid 236

F

face-to-face (FTF) format 153
face-to-face course 23
face validity 3

file management systems 107
Finnish Sports Federation (FSF) 22
flexible interaction 61
formative assessment 6, 76, 80
formative evaluation 236
formative SAPCA feedback, forms of 180
FRAPS 66

G

GIMP 66
good practice principles 82
Google 56
grade point average (GPA) 153
graphical user interface 71
group, functioning as a 50
group discussion 155
group dynamics 137
group functioning skills 146
group identity 49
group learning 48, 146
group learning assessment 137
group marks, validity of 136
group operators 145, 146
group project 43, 140
group project, discussion 145
group project, implications for group learning 146
group project, study results 142
group project work 136
group skills 137
group treasure hunt task 62
group wiki 51
group work goals 64
group working 64
Group Work Project Implementation 61
Group Work Project Methodology 61
group writing 155

H

hardware tokens 101
higher education 55
humanities courses, analysis of undergraduates 154
HYBRID model 198

I

ICT Skills, learner 8
 identification 99
 identification methods, considerations 103
 identification of users 100
 immediacy 71
 impact evaluation 236
 independent thinkers 10
 individuality 24
 individual learning 136
 individual student blogs 62
 individual total peer assessment (ITPA) 177
 information access system 7
 information and communication technologies 79
 information and communication technologies (ICT) 7
 information communication technology (ICT) 77
 information literacy 161
 information literacy scores 163
 information organizer 10
 information technology (IT) 98
 Inkscape 66
 innovation networks 22
 innovative assessment development 15
 integrated e-portfolio project 250
 integrative learning 248
 integrity of data 99
 inter-organizational co-operation 21
 interactivity 71
 International Society of Technology in Education 56
 item category characteristic curves (ICCCs) 196
 item response theory (IRT) modeling 196

K

knowledge differentiation 63
 knowledge domains 121
 knowledge reliability 13
 knowledge validity 1, 11

L

latent classes, identifying 195
 Leapfrog Biology homepage 41

Leapfrog modules, activities in 42
 learner's ICT skills 8
 learner knowledge 254
 learning activities 79
 learning by becoming 60
 learning by doing 60
 learning e-portfolio 246, 247
 learning experiences 47
 learning journals 22
 learning management platforms (LMS) 257
 learning management system (LMS) 80, 87, 100, 244
 learning management systems, teacher-centred nature of 124
 learning models for virtual worlds 58
 learning objectives, types of 77
 learning outcomes, informative 70
 learning outcomes, reflective 70
 learning outcomes, social 70
 learning outcomes, technical 70
 learning portfolio 248
 learning process 28
 learning style 157, 160
 learning styles, empowered 65
 learning styles, realistic 65
 learning styles, superficial 65
 linear regression analysis 88
 logging 108
 logging and auditing data 99

M

machinima 67
 maintenance evaluation 236
 Massey University 243
 Massively Multi-user On-line Role Playing Games (MMORPGs) 56
 meaningful learning, process characteristics 24
 meaningful learning, student perspective 27
 meaningful learning processes 20
 mobile device, is learning effective 218
 mobile devices 221
 mobile group structures 66
 mobile learning 218
 modular structure 42
 monitoring mechanisms 98
 motivation 48
 multimedia portfolio 245

Index

multiple choice questions (MCQ) 99
multiplicative scaling factor (MSF) 173, 176

N

needs assessment 236
net generation 121
network-based education 23
networking competence 22
network management 22
network management, e-learning version 21
network management course 20
New Jersey Institute of Technology (NJIT) 152
Nobel Factor project 46

O

objective assessment 6
on-line content repositories 56
on-line learning 155
online assessment, Deakin University psychiatry units 109
online assessment, ensuring security 97
online assessment, formative and summative purposes 99
online assessment, integrity of data 97
online education, postgraduate program 243
online identity 39
online quizzes, rationale for 87
online quizzes, unsupervised 88
open and distributed learning environments 234
open and distributed learning environments, evaluation strategies 234
open assessment 6
organizational management 21
osmosis 80
ownership 246

P

parallel forms reliability 2
passwords 101
peer-based relationships 117
peer assessment 37, 40, 118
peer assessment, issues in 117
peer assessment of learning 117
peer learning 37

peer production 37, 47
peers 37
peer support 37
peer to peer learning 66
persistence 71
personal identification number (PIN) 101
PGP (Pretty Good Privacy) 105
plagiarism 14
Plymouth Sexual Health 56
Pre-Web 2.0 technologies 123
predictive validity 3
problem-based learning (PBL) 23, 81
problem-based learning literature 55
problem-solving 22
problem based learning (PBL) 57
problem based learning criteria 69
public administration and management 21
public key cryptography (PKC) 105

Q

QWERTY keyboard 220

R

'real world' learning 119
reflective practitioner (RP) 256
reliability 1
reliability, definition 2
reliability and validity, establishing 13
reliability and validity, history 5
reliability and validity, structural relationship 4
retention 22

S

"smart" mobile phones 218
S/MIME (Secure/Multipurpose Internet Mail Extensions) 105
SAPA approach 173
SAPA ratings 173
SAPA system 173
SAPCA, designing assignments for 175
SAPCA, during team assignment 185
SAPCA, individualisation of team scores 175
SAPCA, inducting students 184
SAPCA, making assessments 175
SAPCA, managing team assignment 184

- SAPCA, software and procedural refinements 181
 - SAPCA, training staff 184
 - SAPCA data, individualise student results 185
 - SAPCA documentation, preparation of 183
 - SAPCA effectiveness 180
 - SAPCA feedback screenshot 177
 - SAPCA instructor feedback detailed ratings screenshot 179
 - SAPCA instructor feedback screenshot 178
 - SAPCA instructor feedback team-list screenshot 178
 - SAPCA piloting 181
 - SAPCA screenshot 176
 - SAPCA transparency 180
 - Scholarship of Teaching and Learning (SoTL) 257
 - searchers after knowledge 10
 - Second Life (SL) 55, 56
 - Second Life, environment of 55
 - Second Life, getting started in 67
 - Second Life, Machinima film sets 68
 - self-and-peer assessment (SAPA) 170
 - self-and-peer continuous assessment 174
 - self-and-peer continuous assessment (SAPCA) 170
 - self-and-peer continuous assessment, general principles of 174
 - self-and-peer ssessment tool 170
 - self-and-peer ssessment tool, designing 170
 - self-and-peer ssessment tool, evaluating 170
 - self-and-peer ssessment tool, implementing 170
 - self-assessment 254
 - self-directed learning 37
 - self-direction in learning 24
 - self-managed learner 9
 - self learning skills 56
 - self motivated learning 55
 - short message service (SMS) 101
 - showcase e-portfolio 246
 - showcase e-portfolios 246
 - SL, community aspects of 56
 - SL environment 58
 - smartcards 103
 - social bookmarking 37
 - social constructivism 39, 56
 - social interaction 59
 - social interactions 7
 - social networking applications 56
 - social software 37, 39, 49
 - social software, assessment 40
 - social software, collaborative learning 39
 - social software, concepts of 40
 - social software, transition to university 40
 - socio-technical approach 1
 - socio-technical environment 7
 - socio-technical systems (STSs) 155
 - split-half reliability 3
 - structured e-portfolio 246
 - student-centred models 55
 - student cohort 199
 - student interest and engagement 22
 - student learning, pedagogical implications 85
 - student learning behavior, changes in 8
 - student participation, forms of 179
 - students' learning activities 22
 - students' meaningful learning 20
 - student skills, facilitating development of 189
 - subscriber identity module (SIM) 101
 - summative assessment 6
 - summative assessment, using asynchronous discussion 89
 - summative assessment, validity of 87
 - summative assessment purposes 76
- ## T
- task based learning 66
 - teacher-focused approaches 77
 - teacher-student interactions 7
 - teaching, assessing 20
 - teaching, student perspective on 27
 - teaching/learning process oriented 14
 - teaching and meaningful learning (TML) 20
 - team assignment 175, 183
 - team formation 183
 - team mean peer assessment (TMPA) 177
 - team performance 175
 - team total peer assessment (TTPA) 177
 - technology devices 224
 - technology oriented 14
 - telepresence 59

Index

test-retest reliability 2
theoretical knowledge 22
TML model 21, 23
traditional classroom teaching 255
traditional site-based teaching 254
transition 51

U

unit assessment structure 92
University Centre for Learning and Teaching
(UCLT) 61
usernames 101
users, teachers and students 121

V

validity 1
validity, definition 3
varied autonomous learning 66
video editing 66
virtual businesses 56
virtual classroom 152
virtual integration 64
virtual learning environment (VLE) 56, 62
virtual on-line environments 66
virtual world 55

virtual world educational issues 59
virtual worlds 55, 56
virtual worlds, assessment in 70
virtual worlds, learning and assessment with
55
virtual worlds, learning models for 58
Virtual Worlds Group Work Project 61
virtual worlds in education 69

W

Web 2.0 37
Web 2.0 technologies 38, 117, 126
WebCT 87, 244
WebCT/Blackboard 80
web links 62
wicked problems 22
Wiki 37, 43
wiki, discussion in 48
Wikipedia 56
wikis 37
wikis, criteria used to grade 44
Wikispaces 43
Winning Student Wiki homepage 47
wireless technology 98
World of Warcraft 56