Symbols

3-D concept development 168
3-D rendering 168

A

Accreditation Board for Engineering and Technology (ABET) 117
Action learning 4, 22, 24
Active learning 4, 13, 24
Advanced Process-Oriented Self-Directed Learning Environment (APOSDEL) 52, 53, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71
andragogical learning approach 191
apprentice/mentor model 113
Assessment Agency for Research and Higher Education (AERES) 87, 108
Australian Council for Educational Research (ACER) 28, 45
Australian Institute of Building Surveyors (AIBS) 208
authentic learning 184, 185, 191, 192, 196, 201

B

Balanced Score Cards (BSC) 95, 107
BAM Contractors 221, 222, 226, 227, 229, 233, 234, 237, 241, 242
Bioinformatics (BIF) 139
Biotechnology Business Management Program (Bioentrepreneurship) 139
Biotechnology Practice School (BIPS) 139
Birla Institute of Technology & Science (BITS) 133
blended learning 184, 186, 194, 195, 201, 202, 205
blended learning approach 205
body of knowledge (BoK) 25, 26, 27, 29, 30, 33, 34, 36, 39, 51
Bologna Protocol 28

C

Cambridge-MIT Institute (CMI) 134
Canadian Health Services Research Foundation 38, 46
Centre for Applied Philosophy and Public Ethics (CAPPE) 29, 46
Chemical Engineering Practice School (ChEPS) 131, 132, 133, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161
Chulalongkorn University Intellectual Property Institute (CUIPI) 156
coal seam gas (CSG) 186
cognitive apprenticeship 246
collaboration 164, 166, 167, 169, 170, 171, 173, 174, 176, 177, 180, 181, 182
collaborative learning 213
collaboration and consultation 252
communication and collaboration 252
Communities of Practice (CoPs) 36, 41, 42, 43
comparative global knowledge 117
collaboration 252
compliance 29, 31, 35, 50
collaborative learning 213
computer-mediated instruction 205
collaborative learning 213
collaboration and consultation 252
Constructionism-ChEPS (C-ChEPS) 158, 160
construction industries 206
constructivist theory 15
collaborative learning 213
communication and collaboration 252
Communities of Practice (CoPs) 36, 41, 42, 43
collaborative learning 213
compliance 29, 31, 35, 50
collaborative learning 213
Computer-mediated instruction 205
construction industries 206
Constructionism-ChEPS (C-ChEPS) 158, 160
constructivist theory 15
collaborative learning 213
communication and collaboration 252
Communities of Practice (CoPs) 36, 41, 42, 43
collaborative learning 213
compliance 29, 31, 35, 50
collaborative learning 213
Computer-mediated instruction 205
construction industries 206
Constructionism-ChEPS (C-ChEPS) 158, 160
constructivist theory 15
consultation and collaboration 201
Contextual Learning 5, 6
Continuing Professional Development (CPD) 4, 7, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 47, 49, 50, 226, 228 
Continuing Professional Development Culture 4, 24 
Continuing Vocational Education and Training (CVT) 85, 87, 88, 89, 90, 91, 92, 98, 99, 101, 102, 103, 104, 105, 106, 108 
Cooperation Wizard 57, 58 
Co-operative Education for Enterprise Development (CEED) 134, 160 
cooperative education program (co-op) 111, 118, 119, 138, 142 
co-operative programmes 246 
co-production 231 
CQUniversity (CQU) 185 
Credentiaing 30, 35 
curricula vita (CV) 73, 75 
Cycle of Learning 213 

D 
dedicated e-learning systems 54 
Deeper learning 24, 31 
delayed reviewing 212 
Department of Education, Science and Training (DEST) 3, 7, 9, 10, 11, 13, 15, 19, 20, 23 
design directions 166, 170 
design research 164, 165, 166, 167, 168, 169, 171, 172, 173, 174, 177, 178, 181, 182 
developmental model of intercultural sensitivity (DMIS) 118 
distance education 194, 195, 203, 205 
Division of Professional Practice (DOPP) 111, 112, 113, 115, 116, 117, 118 
Duale Hochschule Baden-Württemberg (DHBW) 245, 246, 247, 248, 250, 251, 252, 253, 254 

E 
economic activity 223 
e-courses 208, 215, 216, 218 
e-learning 221, 228, 231, 253 
e-learning technologies 221, 228, 240 
electronic forums 195 
energy consumption 137, 147 
Energy Policy and Planning Office (EPPO) 146, 147 
engineering disciplines 131 
Enhancing Engineering Education in Europe (E4) 73, 82, 84 
equivalent full-time study load (EFTSL) 207, 208 
European Aeronautic Defence and Space Company (EADS) 52, 59, 64 
European Credit Transfer and Accumulation System (ECTS) 86 
European Credit Transfer System (ECTS) 75, 76, 77, 78, 79, 225, 233, 234, 236 
European Higher Education Area (EHEA) 73, 74, 76, 77, 78 
European Qualifications Framework (EQF) 225 
experience transfer 102 
Experiential Learning 119 
external studies 206 

F 
face-to-face 194, 195, 196, 205, 208, 210, 212, 214, 215, 218 
face-to-face instruction 205 
face-to-face practicum model 113 
face-to-face teaching 248 
Food Engineering Practice School (FEPS) 139, 159, 160 

G 
Georgia Institute of Technology (Georgia Tech) 110, 111, 112, 113, 114, 115, 116, 118, 119 
Gladstone Engineering Planning Committee (GEPC) 186 
Global Disciplinary Practice 117 
Graduate Development Programme (GDP) 223, 230 
graphic presentations 168 

H 
higher education 222, 224, 225, 226, 244, 246, 253, 255 
Higher Education and Training Awards Council (HETAC) 227
Higher Education Authority (HEA) 224, 225, 243
Human and Social potential 4, 24
Human Resources and Skilled Development Canada (HRSDC) 17, 21, 24, 26, 32, 38, 47

I
in-depth collaboration 171
Industrial Training (IT) 72, 73, 74, 75, 77, 78, 79, 80, 81, 82
Industry-Academia partnership 221, 223, 229, 240
informal learning 7, 13, 24
Information Communication Technologies (ICT) 194
Information Society Technologies (IST) 55, 66, 70
Information Technology (IT) 245, 246, 247, 248, 250, 251, 252, 253, 254, 255
Ingénieur d’Exploitation des Systèmes de Production (IESP) 85, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 105, 106, 107
Initial Vocational education and Training (IVT) 85, 87, 88, 89, 90, 91, 92, 101, 102, 103, 104, 108
Innovation Service Network (ISN) 52, 53, 55, 59, 60, 61, 62, 63, 64, 65, 66
Integrated Modeling Methodology (IMM) 60, 63, 67, 70
intellectual property (IP) 173, 176
Intercultural Assimilation 117
Intercultural Development Inventory (IDI) 118
Internationalisation 4, 24
International Plan Committee (IPC) 116
International Plan 111, 113, 115, 116, 118, 128, 129
IP matters 173, 176
Irish Construction Industry 222, 224, 239, 242
irrelevant practice 176
IT Department 248, 250, 254
IT programme 245, 246, 247
IT skills 252
IT technologies 253
ivory tower 185, 186, 193

J
Joint Industry / University Courses 6

K
King Mongkut’s University of Technology Thonburi (KMUTT) 131, 132, 133, 135, 136, 138, 139, 141, 143, 144, 145, 147, 148, 152, 153, 154, 156, 158, 159, 160
knowledge acquisition 191, 205
knowledge creation 200
Knowledge transfer and exchange 4, 20, 24
Knowledge Transfer Partnership (KTP) 236
Knowledge Worker 70

L
Languages for Business and Technology (LBAT) 114
leadership training 226
learning boot camp 137
learning experience 206, 213, 219, 220
learning in engineering disciplines 131
Learning Management System (LMS) 98, 228, 229
learning while earning 206, 210
life-centric 191
lifelong learning 4, 12, 24, 222, 224, 225, 226
liquefied natural gas (LNG) 186
local culture 176

M
maintenance management 184, 186, 187, 188, 189, 190, 192, 193, 194, 197, 201, 202
Manufacturing Engineering Education Partnership (MEEP) 135
Massachusetts Institute of Technology (MIT) 132, 133, 134, 136, 138, 139, 149, 153, 159, 161
memorandum of understanding (MOU) 149, 154
Ministry of Education (ME) 76
Modelling wiKi (MoKi) 60, 61, 62, 63, 67, 70
modes of knowing 211
Moodle courses 195
MSc in Construction Project Management programme (MScCPM) 221, 229, 230, 231, 232, 234, 235, 236, 237, 238, 239, 240, 241
muddy trenches 186, 192, 203

N
National Energy Policy Office (NEPO) 146
National Framework of Qualifications (NFQ) 225, 226, 227, 236
National Qualifications Authority of Ireland (NQAI) 225, 244
National Science and Technology Development Agency (NSTDA) 146, 147, 156
networking 246, 249
non-governmental organizations (NGOs) 73

O
online bullying 216
oral presentation 135, 151
Organisation Learning Profile 40

P
pace-making 212
paper-based TOEFL (PBT) 138, 142, 143
personal enrichment activities 100
Petroleum Institute of Thailand (PTIT) 146, 147, 158
physical asset management strategies 188
PI-ChEPS (Productivity-Improvement ChEPS) 158, 160
policymakers 246
practical design work 168
practice based experience 165
Practice-Based learning (PBL) 132, 134, 135, 136, 137, 138, 139, 140, 143, 144, 145, 146, 158, 161, 162, 163
Practice School (PS) 133, 134
Pre-course experience 6
problem-based learning (PBL) 213
problem-centric 191
problem solving style 248
product design companies 166
Professional Engineering Placement Scholarship (PEPS) 134, 159
Professional Standards Council 30, 48
project based 6
project development 188
project management 228, 229, 230, 234, 242, 243
psychological theories of learning 211
PTT Chemical Public Co., Ltd. (PTT-Chem) 144, 145, 158

Q
Quality Enhancement Plan (QEP) 113, 116
Queensland University of Technology (QUT) 134
question and answer (Q & A) 210

R
real computational environment 55
real knowledge resources 54
real time learning 54
real-world problems 189, 205
Recognition of Prior Learning (RPL) 192
regional collaboration 164, 167, 169, 170, 171, 174, 177, 182
re-learning 212
remedial activities 99
research component 246
research experience 164, 165, 166, 170
rose-tinted glasses 242
Royal BAM Group 221, 222, 227, 235, 241
Royal Decree (RD) 76, 77

S
Second Language Proficiency 117
self assessment 212
self competition 212
Self-Directed Learning (SDL) 70
self-directive process 208
self-evaluating 251
self paced 210
self-regulated learner 208, 220
self-regulation 208
service learning 213
Shulman’s phases of learning 28, 37, 43, 44
Shulman’s table of learning 11
Shulman’s Table of Learning 12
Siam Cement Group (SCG) 143, 144, 158
site projects 136, 137, 138, 144, 148, 150, 151,
152, 153, 154, 155, 156, 157, 158, 163
six educational imperatives 4, 18
skill model 58, 59
small/medium enterprises (SME) 27, 39, 43,
44, 155
social differences 172, 175
social skills 247, 249
Southern Association of Colleges and Schools
(SACS) 113
Spanish Ministry of Education 80
Spanish Network of University Quality Assess-
ment (REACU) 81, 84
Starch Engineering and Process Optimization
Program (SEPO) 139
Supervised Experience 5, 6
supply-chain 224
supportive working environment 176
support network 216

T

Task And Competency Tool (TACT) 60, 61, 62,
63
task-centric 191
task model 58, 60, 61, 70
Technical University of Munich (TUM) 114
Technology and Development Program (TDP)
139
technology assisted learning 228
Technology Reinvestment Program (TRP) 135,
162, 163
Thailand Research Fund (TRF) 158
Thai Oil Public Co., Ltd. (ThaiOil) 143, 144,
151, 152
theory into practice 210, 216, 217, 218
topic model 58, 59, 61, 70
traditional classroom 221, 228, 240
transfer of learning 13, 16, 17, 20, 24, 25, 26,
31, 32, 34, 35, 43, 45, 47, 48

U

U-ChEP (Undergraduate ChEPS) 159
University-Industry Research Collaboration
Program (U-IRC) 147
University of Queensland (UQ) 134, 159
University of Southern Queensland (USQ) 134

V

V-ChEPS (Vocational-ChEPS) 158
videoconference 216
virtual community 253
virtual community of practice 253
Vocational 5, 6

W

Waterford Institute of Technology (WIT) 221,
222, 223, 226, 227, 228, 229, 230, 231,
232, 233, 234, 235, 237, 238, 239, 240,
241, 242
web-based medium 216
WIKIS 252, 253
Work Abroad Program 111, 112, 113, 115, 116,
118
work attachment 170, 173
work-based assessment 235
Work Based Learning (WBL) 6, 23, 85, 93, 95,
101, 105, 106, 107
work experience 5, 6, 209, 213, 214, 215, 216,
220
working environment 168, 175, 176, 177
work-integrated arrangement 170
work-integrated experience 165, 166, 174
work-integrated learning 164, 165, 166, 167,
169, 170, 171, 172, 173, 174, 175, 176,
177, 178, 180, 181, 183
work-integrated learning experience 206, 213
work-integrated learning process 174
work-integrated learning programmes 171
Work Integrated Learning (WIL) 1-20, 23-27,
32, 37, 38, 39, 42, 43, 45, 50, 51, 53, 54,
55, 58, 59, 61, 63, 64, 66, 72, 73, 85, 89,
93, 95, 96, 105, 107, 108, 109, 132, 206,
209-222, 231, 242, 245, 246, 247, 251,
253
Work Integrated Research (WIR) 200, 201, 205
Work Integrated Training 102
workplace-based learning 206
workplace-based program (WPL) 213
work placement 220
Work ready 4, 24
World Association for Cooperative Education (WACE) 2, 21, 23

Z
Zentrale Evaluations- und Akkreditierungsgentur (ZEvA) 251