Index

Abouleish, Ibrahim 137
Abramovich, Marina 145
action-based learning 104
action-orientated experiential learning 116
Activist and Pragmatist approaches 139
activity theory 85
advanced education systems 20
alternative learning activities 31
alumni 24, 92, 96, 99–101, 125, 129, 131, 132, 139
Angelou, Maya 88, 93
application stage 21, 22
Applied Psychology: An Introduction to the Principles and Practice of Education (McLellan and Dewey) 30
Arendt, Hannah 145
Aristotle 29
Australian entrepreneurship ecosystem 120
awakening and knowledge stage 21, 22
Bacigalupo, Margherita 133
balancing theory 30
Baron, R. 106
Baxter Magolda, M.B. 41
Becker, Howard 145
Beckett, Samuel 145
beginner’s mind 14, 18, 19
beginning or initiation phase 153
Beuys, Joseph 145
Boundary Crossing sessions 85
Bourdieu, Pierre 145
Bronfenbrenner, Urie 40
Brown, Daniel
Poetry of Victorian Scientists 61
Burnside, John 63
business community 25
business education 92
Business School education 127
Carey, C. 56, 57
Castells, Manuel 143
CBE theory see competency-based education (CBE) theory
challenge-based education 28
Change Laboratory interventions 79–81, 83–5
CHAT see Cultural Historical Activity Theory (CHAT)
classical economic entrepreneurship 137
classroom environment 128
CLT see cognitive load theory (CLT)
co-curricular program development 25
cognitive ability 27
cognitive load theory (CLT) 31, 35
Comenius, John Amos 14
common creativity techniques 107
community 24, 48, 50, 53, 81, 89, 99, 127
business 25
design 107, 111
learning 141
competency-based approach of White 15
competency-based education (CBE) theory 20, 21, 23, 24
competency structure model 20
conditional knowledge 29
‘Continuous Conceptual Review Model’ 101
creative and entrepreneurial skills 155
creative education 66
creative entrepreneurship 157
typical entrepreneurial ventures 153–6
facilitation philosophy 150–151
ideal graduate 151–2
shared wisdom 157–8
theories of development 153
type of graduate 152
creative fitness
developing enterprising creative thinkers 72–6
ideal graduate 71
Kath Penaluna, Colin Jones, and Andy Penaluna - 9781789909029
Downloaded from PubFactory at 09/18/2023 02:31:27AM
via free access
shared wisdom 76–7

teaching/facilitation philosophy 69–70
theories of development 72
type of graduate 71–2
creative ideas 106
creative potential 104
developing enterprising creative thinkers 107–10
ideal graduate 105–6
shared wisdom 110–112
teaching/facilitation philosophy 104–5
theories of development 107
type of graduate 106
creative practices 70
creative technical skills 157
creative thinkers 62, 72, 81, 89, 107
areas of student/graduate difficulty 64–5, 74–5, 83–4, 100, 109
challenges 65, 75, 84, 91–2, 100–101, 109–10
evaluating outcomes 64, 74, 83, 91, 99–100, 108–9
nature of confirmation 65–6, 76, 84–5, 101, 110
stages of development 63, 73–4, 82, 90–91, 98–9, 108
creative thinking 60, 67, 111
creativity as expansive learning 78
developing enterprising creative thinkers 81–5
ideal graduate 79–80
shared wisdom 85
teaching/facilitation philosophy 78–9
theories of development 80–81
type of graduate 80
critical thinking 145
cross-pollination 60
Csikszentmihalyi 117
Cultural Historical Activity Theory (CHAT) 78, 80, 85
curiosity 20, 27, 61, 71, 104, 105, 109, 117, 129, 145

Design-Based Enterprise Assessment Model 108
design education approaches 108
design-informed creative thinking 110
Design Thinking 111
design thinking approach 89
design-thinking-informed process 73

Dewey, John 14, 30, 32, 35, 44, 49, 117

Applied Psychology: An Introduction to the Principles and Practice of Education 30

How We Think 30

Double Diamond design process 108

education systems 14
Edwards, C. 104
enterprise and entrepreneurship (EE) education 15, 37, 39, 44, 45, 104–8, 112
enterprise skills 114, 115, 121, 122, 124
EntreComp Framework 56, 97
entrepreneurial alumni 132
entrepreneurial behaviours 104
entrepreneurial classroom 86
developing enterprising creative thinkers 89–92
ideal graduate 88
shared wisdom 92–3
teaching/facilitation philosophy 87
theories of development 89–90
type of graduate 88–9
entrepreneurial diary method 31
entrepreneurial ecosystem 114, 122, 130
entrepreneurial education 114
entrepreneurial graduates 40, 50
areas of student difficulty 33, 42, 52–3
assessing outcomes 32, 41–2, 51–2
challenges 33, 43, 53
ideal graduate 28–9
nature of confirmation 34–5, 43, 53
shared wisdom 35–6
stages of development 20–21, 31–2, 41, 51
teaching philosophy 27–8
theories of development 30
type of graduate 29
entrepreneurial intentionality 124
entrepreneurial journey 123
developing entrepreneurial ventures 121–4
facilitation philosophy 119–20
ideal graduate 120–121
shared wisdom 124–5
theories of development 121
entrepreneurial learning 119
entrepreneurial mindset 18, 19, 21, 104–6, 123, 124, 139, 158
entrepreneurial opportunities by design 104
developing enterprising creative thinkers 107–10
ideal graduate 105–6
shared wisdom 110–112
teaching/facilitation philosophy 104–5
theories of development 107
type of graduate 106
entrepreneurial venture-creation project 72
entrepreneurial ventures 121, 145
areas of student/graduate difficulty 123, 130–131, 139, 147, 155
beginning or initiation phase 153
challenges 124, 131, 140, 147, 156
evaluating outcomes 123, 130, 139, 154–5
learning-by-doing phase 153–4
nature of confirmation 124, 131, 140–141, 148, 156
shared wisdom 148–9
entrepreneurship 22, 125, 152, 156
classical economic 137
creative (see creative entrepreneurship)
ecosystem 119
educators 23
policy recognition for 114
program 101
theories of 19, 41
USAID 139
entrepreneurship education 14, 23, 116, 121, 136
developing entrepreneurial graduates 20–24
ideal graduate 18–19
programs 123
shared wisdom 24–5
teaching philosophy 17–18
theories of development 19–20
type of graduate 19
environmental interaction framework 42
epistemological reflection model 41
Erickson, Erik 44
evidence-based artefacts 51
evidence-based educational goal attainment 29
expansive learning, creativity as 78
developing enterprising creative thinkers 81–5
ideal graduate 79–80
shared wisdom 85
teaching/facilitation philosophy 78–9
theories of development 80–81
type of graduate 80
experience-based pedagogical approach 30
experiential education 20, 27, 30, 35
Experiential Entrepreneurship Curriculum 50
experiential entrepreneurship education 28
experiential learning 19
modalities 21
facilitation philosophy 126–7, 143–4
Fee, Alistair 56, 57
Fisk, Peter 62
‘functional fixedness’ 97
‘Gateway Triangle’ 56
Gibb, Allan 106, 133
Global Entrepreneurship Week 136
Godin, Seth 62
graduate, type of 49, 61–2, 97, 128, 144–5
creative entrepreneurship 152
creative fitness 71–2
entrepreneurial classroom 88–9
entrepreneurial graduates 29
entrepreneurial journey 121
entrepreneurial opportunities by design 106
entrepreneurship education 19
expansive learning, creativity as 80
harmonious venture 137
slow graduates 39
Grichnik, Dietmar 121
Grichnik navigator approach 122
How to develop entrepreneurial graduates, ideas and ventures

Hägg, G. 14, 15
Hamel, G. 114
Harford, Tim 72
Harmonious Entrepreneurial Society 136
Harmonious entrepreneurial venture 136
Harmonious venture 135
developing entrepreneurial ventures 138–41
ideal graduate 136–7
shared wisdom 141
theories of development 137–8
type of graduate 137
Heath, Roy 41, 71
HEIs 155
HESA see Higher Education Statistics Agency (HESA)
heutagogical (self-determined learning) approaches 128
Higher Education Statistics Agency (HESA) 114
How We Think (Dewey) 30
Hubbard, Elbert 114
human-centred design-thinking 73
human-centric approach 153
human-centric thinking 151
ideal graduate 48–9, 61, 96–7, 128, 144
creative entrepreneurship 151–2
creative fitness 71
creativity as expansive learning 79–80
entrepreneurial classroom 88
entrepreneurial graduates 28–9
entrepreneurial journey 120–121
entrepreneurial opportunities by design 105–6
entrepreneurship education 18–19
harmonious venture 136–7
slow graduates 38–9
idealistic blueprint 29
ignatian heritage 49
IICED see International Institute for Creative Entrepreneurial Development (IICED)
independent thinking 41
influential teaching philosophies 14–16
interdisciplinary program 28
International Institute for Creative Entrepreneurial Development (IICED) 96
interweave theory 32
Jarman, Dave 56–7
Jesuit education approach 48
Jobs, Steve 88
Johnson, Steven 72
Jones, Colin 14, 15, 133
Jung-Beeman, Mark 102
Kahl, John J. 48
Keats, John 61
Kelly, Tom 62
Kirby, D.A. 101, 114–16, 118, 136
Klein, Yves 67
knowledge-based marketing 28
Kolb, D.A. 89
Kotler, Philip 60
Kounios, John 102
Krueger, Norris 130, 133
Lans, T. 137
Law of Requisite Variety 137
learning-by-doing phase 153–4
learning community 141
learning process 30, 41, 43, 147
Lewin, Kurt 40
Maritz, A. 115, 116
mastery learning approach 52
mastery or leadership stage 21, 22
Matlay, Harry 133
Maxwell, James Clerk 61
McCallum, Elin 133
McClelland, David 20
McLellan, J.
Applied Psychology: An Introduction to the Principles and Practice of Education 30
Mezirow, J. 42, 116
mindset
creative 106, 107
entrepreneurial 18, 19, 21, 104–6, 123, 124, 139, 158
Montessori, Maria 88
Morselli, D. 56, 57
Moss Kanter, R. 138
<table>
<thead>
<tr>
<th>Name</th>
<th>Page(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mugione, Fiorina</td>
<td>133</td>
</tr>
<tr>
<td>Mullins, John</td>
<td>62</td>
</tr>
<tr>
<td>Murray, Henry</td>
<td>40</td>
</tr>
<tr>
<td>National Council for Graduate Entrepreneurship (NCGE)</td>
<td>104</td>
</tr>
<tr>
<td>open-ended process</td>
<td>83</td>
</tr>
<tr>
<td>Organisation for Economic Co-operation and Development (OECD)</td>
<td>80</td>
</tr>
<tr>
<td>Osterwalder, Alex</td>
<td>62</td>
</tr>
<tr>
<td>Palmer, Parker J.</td>
<td>44</td>
</tr>
<tr>
<td>peer sharing of information</td>
<td>107</td>
</tr>
<tr>
<td>peer-to-peer learning and group work</td>
<td>152</td>
</tr>
<tr>
<td>Penaluna, Andy</td>
<td>57, 118, 133</td>
</tr>
<tr>
<td>Piaget, Jean</td>
<td>49</td>
</tr>
<tr>
<td>Pigneur, Yves</td>
<td>62</td>
</tr>
<tr>
<td>Pittaway, C.</td>
<td>104</td>
</tr>
<tr>
<td>Ploum, L.</td>
<td>137</td>
</tr>
<tr>
<td>poetry 63, 65</td>
<td></td>
</tr>
<tr>
<td>Poetry of Victorian Scientists (Brown)</td>
<td>61</td>
</tr>
<tr>
<td>policy recognition for entrepreneurship</td>
<td>114</td>
</tr>
<tr>
<td>Popper, K.</td>
<td>137</td>
</tr>
<tr>
<td>Porter, Michael</td>
<td>60, 62</td>
</tr>
<tr>
<td>Poynton, Robert</td>
<td>77</td>
</tr>
<tr>
<td>practical wisdom 15, 38, 40, 44</td>
<td></td>
</tr>
<tr>
<td>pre-existing knowledge 57</td>
<td></td>
</tr>
<tr>
<td>preferred learning styles 135</td>
<td></td>
</tr>
<tr>
<td>‘premature articulation’ 97–8, 109</td>
<td></td>
</tr>
<tr>
<td>problem-based learning 27</td>
<td></td>
</tr>
<tr>
<td>problem-solving process 64, 91, 128</td>
<td></td>
</tr>
<tr>
<td>prudent 28–31, 40</td>
<td></td>
</tr>
<tr>
<td>reasonable adventurer approach 15, 39–41, 43, 72</td>
<td></td>
</tr>
<tr>
<td>reflection, self-evaluation and 155</td>
<td></td>
</tr>
<tr>
<td>reflective diary, structure of 34</td>
<td></td>
</tr>
<tr>
<td>reflective thinking 33</td>
<td></td>
</tr>
<tr>
<td>Robinson, Sir Ken</td>
<td>40, 88</td>
</tr>
<tr>
<td>Rogers, Carl</td>
<td>40, 44</td>
</tr>
<tr>
<td>Rogoff, Barbara</td>
<td>49</td>
</tr>
<tr>
<td>Romano, S.</td>
<td>56, 57</td>
</tr>
<tr>
<td>scenario-based projects 98</td>
<td></td>
</tr>
<tr>
<td>Schawlow, Arthur Leonard</td>
<td>68</td>
</tr>
<tr>
<td>Seelig, T.</td>
<td>56</td>
</tr>
<tr>
<td>self-evaluation and reflection 155</td>
<td></td>
</tr>
<tr>
<td>self-funded group exhibition 99</td>
<td></td>
</tr>
<tr>
<td>self-negotiated action 37–9</td>
<td></td>
</tr>
<tr>
<td>self-reflection 89</td>
<td></td>
</tr>
<tr>
<td>Shane, S.</td>
<td>19</td>
</tr>
<tr>
<td>shared wisdom 54, 66–7, 101–3, 132–3</td>
<td></td>
</tr>
<tr>
<td>creative entrepreneurship 157–8</td>
<td></td>
</tr>
<tr>
<td>creative fitness 76–7</td>
<td></td>
</tr>
<tr>
<td>creativity as expansive learning 85</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial classroom 92–3</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial graduates 35–6</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial journey 124–5</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial opportunities by design 110–112</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial ventures 148–9</td>
<td></td>
</tr>
<tr>
<td>entrepreneurship education 24–5</td>
<td></td>
</tr>
<tr>
<td>harmonious venture 141</td>
<td></td>
</tr>
<tr>
<td>slow graduates 44–5</td>
<td></td>
</tr>
<tr>
<td>situated cognition 20, 21, 23, 24</td>
<td></td>
</tr>
<tr>
<td>situated learning, components of 20</td>
<td></td>
</tr>
<tr>
<td>slow graduates</td>
<td></td>
</tr>
<tr>
<td>developing entrepreneurial graduates 40–43</td>
<td></td>
</tr>
<tr>
<td>ideal graduate 38–9</td>
<td></td>
</tr>
<tr>
<td>shared wisdom 44–5</td>
<td></td>
</tr>
<tr>
<td>teaching philosophy 37–8</td>
<td></td>
</tr>
<tr>
<td>theories of development 40</td>
<td></td>
</tr>
<tr>
<td>type of graduate 39</td>
<td></td>
</tr>
<tr>
<td>social intelligence 128</td>
<td></td>
</tr>
<tr>
<td>startup</td>
<td></td>
</tr>
<tr>
<td>creative 148</td>
<td></td>
</tr>
<tr>
<td>graduate 114</td>
<td></td>
</tr>
<tr>
<td>knowledge-based 144</td>
<td></td>
</tr>
<tr>
<td>student difficulty, areas of 22–3</td>
<td></td>
</tr>
<tr>
<td>student experience 47</td>
<td></td>
</tr>
<tr>
<td>student learning experiences 123</td>
<td></td>
</tr>
<tr>
<td>Suntola, Silja</td>
<td>114, 117</td>
</tr>
<tr>
<td>sustainability 97, 136, 137</td>
<td></td>
</tr>
<tr>
<td>Sutton, Robert</td>
<td>62</td>
</tr>
<tr>
<td>Syed, Matthew</td>
<td>72</td>
</tr>
<tr>
<td>Synek, Simon</td>
<td>62</td>
</tr>
<tr>
<td>teaching/facilitation philosophy 59–60, 95–6</td>
<td></td>
</tr>
<tr>
<td>creative fitness 69–70</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial classroom 87</td>
<td></td>
</tr>
<tr>
<td>entrepreneurial opportunities by design 104–5</td>
<td></td>
</tr>
<tr>
<td>teaching philosophy 28, 47–8</td>
<td></td>
</tr>
<tr>
<td>testing or feedback phase 154</td>
<td></td>
</tr>
</tbody>
</table>
How to develop entrepreneurial graduates, ideas and ventures

theoretical knowledge and frameworks 155
theories of development 49–50, 62, 97–8, 128–9, 145
creative entrepreneurship 153
creative fitness 72
entrepreneurial classroom 89–90
entrepreneurial graduates 30
entrepreneurial journey 121
entrepreneurial opportunities by design 107
entrepreneurship education 19–20
expansive learning, creativity as 80–81
harmonious venture 137–8
slow graduates 40
theories of entrepreneurship 19, 41
Theory of Electromagnetism 61
theory of situated cognition 20
traditional economic approach 136

traditional education 56, 65
traditional linear planning tools 157
transformational learning 42, 56, 87
Tynan, M. 56–8
Tyndall, John 61

UK Quality Assurance Agency guidance 131
University of Tampa (UT) 18
USAID entrepreneurship 139
UT see University of Tampa (UT)

Venkataraman, S. 19
Vygotskian process 78
Vygotsky, Lev 49, 78

White, Rebecca 14, 15
Whitehead, A. 129
Winkel, Doan 14, 15