

Index

A

A.B. Combs Leadership Magnet
Elementary School (Raleigh,
North Carolina), 199
Abstract thinking, 84–87
*Achieving Participatory
Development*
*Communication through 3D
Model Building* (Lauren
Leigh Hinthorne), 202–203
Action learning, 199
Adams, Scott, 124–125
Alterations, planning for, 61–62
Answers, certainty of, 209–210
Anterior cingulate cortex (ACC),
107
Antifragile (Nassim Nicholas
Taleb), 215
Antifragility, 137–138
Anxiety, 112, 114, 116
Apple, 121
Applications of LEGO SERIOUS
PLAY:
across cultures, 208
across industries and areas,
207
in business, *see* Business
applications of LEGO
SERIOUS PLAY
in customized workshops,
208–209
in education, 198–200
at LEGO Company, 187–193
non-business applications,
197–203

in pushing business/societal
boundaries, 213–220
in research, 200–203
Application Techniques (ATs), 51,
54–59. *See also individual
techniques*
as processes without content, 52
spatial orientation through, 99
systematic use of, 50
Architects, play with a purpose by,
44
Ariely, Daniel, 219
Army, 43–44
Arousal, attention and, 98
Attention, 97–100, 194–105
defined, 97
and insight development, 107
“invisible gorilla” test of, 20,
215
memory and, 104
to subtle signals, 108
Attention density, 17, 98

B

Bateson, Gregory, 198
Behavior:
of facilitators, 69–71
of group, 69, 71–74
Beliefs, in LEGO SERIOUS
PLAY etiquette, 69, 70
Beyond the Stable State (Donald
Schön), 32, 33
Big data, 215
Blockbuster, 20
Boredom, 112, 113, 116
Boundaries, pushing, 213–220

Brain, 131, 217. *See also*
Neuroscience
Breaking habitual thinking, 20–21,
42
Bricks, *see* LEGO® bricks
Brick by Brick (David Robertson),
28
Brown, Stuart, 40, 131, 132
Budgeting, 45, 138
Building:
to build knowledge, 79–84
to lead the mind, 72, 87–93
Building knowledge, 79–93
by building things in the world,
79–84
and concrete vs. formal abstract
thinking, 84–87
by unlocking new knowledge,
87–93
Business applications of LEGO
SERIOUS PLAY, 147–183
to bridge diversity, 151
case examples of, 151–181
for complex, dynamic
challenges, 150–151
to encourage leaning forward,
147–148
for enterprise, team, and
personal development,
149–150
misconceptions about, 181–183
Business Model Canvas, 22, 41,
120
Business needs, 15–24
breaking habitual thinking,
20–21

228

INDEX

Business needs (*continued*)

- case example of, 22
- impact of LEGO SERIOUS PLAY for, 23–24
- leading to unlock, 17–20
- leaning in, 16–17
- 20/80 meetings, 15

C

- Caillois, Roger, 43
- Carnegie Mellon University, 218
- Carrot-and-stick approach, 219
- Chabris, Christopher, 20, 215
- Challenges:
 - balance of competence and, 111–112
 - of dynamic complexity, 150–151, 214–215
 - framing, 71
 - in workshops, 74
- Challenging imagination, 123–126
- Change, pace of, 23–24
- Christiansen, Godtfred Kirk, 27, 28
- Christiansen, Ole Kirk, 27
- Chunking, 105
- Clutch power, 28
- Collective intelligence (*c-factor*), 218
- Comfort zones, leaving, 60–61
- Complexity, 63–64, 150–151, 214–215
- Computer games, 113
- Concrete thinking, formal abstract thinking vs., 84–87
- Connections:
 - making (AT 4), 56
 - between purposes of company and employees, 19–20
- Constructionism, 82–84, 86–87
- Constructivism, 81–82
- Consultant, facilitator as, 60

- Context, memory retrieval and, 102
- Core Process, 50–53, 137
- CreateMe, 176
- Creative Explorations* (David Gauntlett), 202
- Creative imagination, 120–123, 126
- Creativity, imagination vs., 119
- Csikszentmihalyi, Mihalyi, 111

D

- Davachi, Lila, 101–102
- Death by data, pushing past, 215
- Decisions, testing (AT 6), 58
- Decision making, 42, 44–45
- Declarative memory, 100
- Deconstruction, 124–125
- Descriptive imagination, 120, 121, 126
- Dewey, John, 119, 199
- “Dilbert,” 124–125
- Diversity, bridging, 151
- Drawing, limitations of, 35
- Drive* (Daniel H. Pink), 219
- DUPLO bricks, 29, 34
- Dynamic complexity, 150–151, 214–215

E

- Economic change, 213
- Economic stagnation, pushing past, 215–216
- Education:
 - LEGO SERIOUS PLAY, method in, 198–201
 - using bricks in, 30
- Einstein, Albert, 216
- Eisenhower, Dwight D., 44
- Emergence:
 - playing (AT 6), 58
 - in systems, 18

Emotions:

- attention driven by, 97, 98
 - with flow, 111. *See also* Flow
 - memory and, 103
 - Encoding memories, 100–101
 - Energy, potential and kinetic, 42
 - Enterprise development, 62, 149–150, 152
 - Episodic memory, 100
 - Equality, 217
 - Escuela Universitaria Real Madrid, 201
 - Etiquette, 69–74
 - beliefs in, 69, 70
 - group dynamics in, 69, 71–74
 - need for, 69
 - process in, 69–71
 - Eurasian Natural Resources Corporation plc (ENRC), 167–168
 - Evolution, 89–91
 - Executive Discovery LLC, 4–5
 - Executive Discovery Ltd., 2–4
 - Executive organization, 98, 99
 - Experience with LEGO building, 34–35
 - Expert knowledge, 219
 - Exploration, implementation vs., 41–42, 135–138
- F**
- Facilitation, 68
 - Facilitators, 59–62
 - etiquette for behavior of, 59–62
 - process leaders vs., 69–70
 - responsibilities of, 59–60
 - rules established by, 139–141
 - training of, 68
 - traps for, 60–62
 - FIRST*, 163–164

INDEX

229

Flow, 111–116
 concept of, 111–114
 in LEGO SERIOUS PLAY,
 114–116
 participation and, 72
 staying in, 73
 in traditional meetings, 16
 and 20/80 meetings, 16–17
 Formal abstract thinking, concrete
 thinking vs., 84–87
 Framing:
 of challenges, 71
 of goals, 60
 Furth, Hans, 90–91

G

Gaming the play, 209
 Gauntlett, David, 202
 Generation, information, 102–103
 Goals, 135
 framing and setting of, 60
 of organization and employees,
 19–20
 Google, 121
 Grienitz, Volker, 200
 Group dynamics:
 in the etiquette, 69, 71–74
 principles of/procedures for,
 49–50
Group Genius (Keith Sawyer), 218

H

Habitual thinking, breaking,
 20–21, 42
 Hakuodo, Inc., 175–176
 Hamel, Gary, 121
 Hammer, Michael, 122
The Hand (Frank Wilson), 90
 Hand knowledge, 87–93
 Heisenberg's uncertainty
 principle, 210

Hero leadership, pushing past,
 217–218
 High-tech myopia, pushing past,
 216–217
 High tech needs, 24, 217
 High touch needs, 24, 217
 Hinthorne, Lauren Leigh,
 202–203
 Hippocampus, 101
 Hitachi Systems, Ltd, 155–156
 Homo habilis, 90
Homo Ludens (Johan Huizinga),
 39
 Huizinga, Johan, 39, 131, 133

I

ICEMAR, 161–162
 Identity, group, 19
 Imagination, 119–127
 challenging, 123–126
 creative, 120–123, 126
 creativity vs., 119
 descriptive, 120, 121, 126
 intentional application of,
 40–41
 strategic, 119, 125–127
 Imagination Lab, 4
*The Imaginopedia for Real Time
 Strategy for the Enterprise*,
 208
 Implementation, preparation and
 exploration vs., 41–42,
 135–138
 Individual genius, 218
 Individual models and stories,
 building (AT 1), 54, 55, 71,
 104, 108
 Insight, developing, 106–108
 Instructionism, 84
 Intelligence:
 collective, 218
 growth of, 90–91

Intentional gathering to apply
 imagination, 40–41, 134–135
 Interrelationships, 92–93
 “Invisible gorilla” test, 20, 215

J

Johanson, Donald, 89

K

Kiahane, Adam, 160
 Kiefer, Tobias, 101–102
 Kinetic energy, 42
 Kits, LEGO SERIOUS PLAY,
 34–35
 Knoop, Hans Henrik, 114
 Knowledge:
 building, 79–93
 expert, 218
 hand, 87–93
 unlocking, 17–18
 Knowledge structures, 81
 Kodak, 20
 Kongsberg Satellite Services AS
 (KSAT), 161–162
 Kristiansen, Kjeld Kirk, 1, 4, 5, 29,
 187, 207
 Kristiansen, Per, 200

L

Landscape, creating (AT 3), 54–56
 105, 138
 Language:
 in scenario planning/
 development, 44–45
 of serious play, 15, 42–45,
 138–139
 Leadership:
 hero, 217–218
 in unlocking knowledge, 17–18
 Leading to unlock, 17–20
 Leakey, Louis, 89

230

INDEX

- Leakey, Mary, 89
 Leakey, Richard, 89
 Lean Canvas, 22
 Leaning in (leaning forward):
 creating, 16–17
 encouraging, 147–148
 Leaning out, 16, 17, 148
 Learning, 132
 action, 199
 attention as driver of, 97
 biological feedback rewarding,
 111
 distributed, 104–105
 flow and, 112–114. *See also*
 Flow
 LEGO Architecture, 30, 31
 LEGO® bricks, 27–35
 conflicting signal from, 187–188
 design of, 27–28
 history of, 27–29
 learning and business uses of,
 29–31, 68
 in LEGO SERIOUS PLAY kits,
 34–35
 LEGO SERIOUS PLAY use of,
 31–34
 misconception about, 182
 systematic use of, 50
 LEGO Company, 1, 5–8, 182–183
 guiding principles for, 28–29
 use of the method at, 187–193
 LEGO Education, 4, 30, 34
 LEGO Foundation, 8–9
 LEGOLAND theme park, 29
 LEGO Mindstorms, 30
 LEGO® SERIOUS PLAY®
 method, 49–64, 67–68
 applications of, 62–64
 Application Techniques of, 50,
 54–59
 Core Process in, 50–53
 criteria for, 68
 defined, 49
 facilitator traps with, 59–62
 future of, 213–214
 group dynamic principles/
 procedures in, 49–50
 history of, 1–10
 LEGO Company's use of,
 187–193
 LEGO SERIOUS PLAY kits,
 34–35
 motivations for using, 197–198
 pitfalls with, 209–210
 series of questions in, 27
 use of bricks in, 31–34, 50
 value creation by, 15
 LEGO SERIOUS PLAY Real
 Time Strategy for the
 Enterprise, 208
 LEGO System of Play, 29
 LEGO TC Logo, 83
 LEGO Technic, 34
 Logo (programming language), 83
 Long-term memory, 100
- M**
 Massachusetts Institute of
 Technology (MIT), 218
 Meaning, in models, 72, 101–102,
 140
 Meaningful work, 219
 Meetings:
 high-touch, 24
 “lean forward,” 148
 100/100, 17
 20/80, 15–17, 97
 Memory, 132
 enhancing, 104–105
 formation and retention of
 memories, 100–104
 learning as driver of, 97
 unlocking knowledge stored in,
 17–18
- Metaphors:
 bricks as, 30–34, 53
 in descriptive imagination, 120
 Metonyms, bricks as, 30, 31, 53
 Microsoft, 121
 Mobile phones, 141
 Modifications, planning for, 61–62
 Mood, 107
 Motivation, 219
- N**
Naturally Selected (Mark van
 Vugt), 217
 Needs, 219
 balancing, 24
 unknowns in, 23
 Netflix, 20
 Neuroscience, 97–108
 attention, 97–100
 developing insight, 106–108
 memory and attention,
 104–105
 memory formation and
 retention, 100–104
 Nielsen, Louise Møller, 200
 Nokia, 122
 Nondeclarative memory, 100
 Novelty detection and reward, 98,
 99
- O**
 Observers, 210
 100/100 meetings, 17
 Osterwalder, Alexander, 22,
 120
 Ownership of models, 73, 140
- P**
 Pag, Hilary Fisher, 27
 Papert, Seymour, 82–84, 86–87
 Penfield, Wilder, 90, 91

INDEX

231

Personal and Shared Experiential

- Concepts* (Louise Møller Nielsen), 200
- Personal development, 62, 149–150, 152
- Piaget, Jean, 81, 82, 86, 90
- Pilots, play with a purpose by, 44
- Pink, Daniel H., 219
- Plath, Robert, 122
- Play, 131–134
 - benefits of, 131–132
 - characteristics and elements of, 132–133
 - purposes of, 39–40
 - serious, *see* Serious play
- Play, Learning and Creativity (Hans Henrik Knoop), 114
- Play-fighting, 131–132
- Porter, Michael, 120
- Positive affect, 107
- Potential energy, creating, 42
- Preece, Sir William, 20
- Preparation, implementation vs., 41–42, 135–138
- Priming, 108
- Process(es). *See also* Core Process
 - in the etiquette, 69–71
 - trust in, 71
 - without content, 52
- Process leader role, 69–70
- Purpose(s):
 - of company and employees, connecting, 19–20
 - of play, 39–40
 - play with, 43
 - of serious play, 134, 135
- Pushing boundaries, 213–220

Q

- Questioning, 27, 73, 140–141, 210

R

- Rasmussen, Jette, 3
- Reengineering, 122
- Research, LEGO SERIOUS PLAY in, 200–203
- Reward, 98, 99
- Ries, Eric, 22
- Robertson, David, 28
- Rock, David, 101–102
- Rock, Lisa, 101–102
- Rollaboard, 122, 123
- Roos, Johan, 1–2, 4, 6, 114
- Rules:
 - in scenario planning/development, 44–45
 - of serious play, 42–45, 138–141

S

- Sarcasm, 124
- Sawyer, Keith, 218
- Scenario planning/development, 41, 44–45
- Scenario testing, 125
- Scharmer, C. Otto, 214
- Schmidt, André-Marcel, 200
- Schön, Donald, 32, 33
- Schulte, Helmut, 200
- Science platform of LEGO SERIOUS PLAY, 75–76
 - building knowledge, 79–93
 - flow, 111–116
 - imagination, 119–127
 - neuroscience, 97–108
 - play, 131–141
- Scientific American, 23
- Scurri, 21–22, 41, 106
- Semantic memory, 100
- Serious play, 39–46, 131, 133–141
 - defined, 39
 - as exploring and preparing vs. implementing, 41–42, 135–138

- as intentional gathering to apply imagination, 40–41, 134–135
- key characteristics of, 40
- and purposes of play, 39–40
- resources on, 45–46
- as specific set of rules/language, 15, 42–45, 138–141
- in workshops, 134–141
- Shared agreements, 137
- Shared models and stories, building (AT 2), 55, 71, 138
- Short-term memory, 100
- Simon, Daniel, 20, 215
- Simple Guiding Principles, extracting (AT 7), 58
- Skiing, 113
- Skills building, 115
- Solution, 135
- Spatial orientation, 98, 99
- Stories:
 - constructing/sharing, 70–71
 - listening to/accepting, 73
 - unrelated to LEGO model, 61
- Strategic imagination, 119, 125–127
- Strategy making:
 - play with a purpose in, 44
 - rules and language of, 42–43
- Systems:
 - building (AT 5), 56, 57, 138
 - understanding of, 18–19

T

- Taleb, Nassim Nicholas, 138, 213, 215
- Tattersall, Alex, 167, 168
- Team development, 63, 149–150, 152

232

INDEX

Technology, 216
 high-tech myopia, 216–217
 high tech needs, 24, 217
 mobile phones, 141
 Territory of LEGO SERIOUS
 PLAY, 67
 business needs, 15–24
 LEGO® bricks, 27–35
 etiquette, 69–74
 serious play, 39–46
 Testing decisions (AT 6), 57, 59
 Theme sets, 29
 Thinking:
 building to initiate, 72, 87–93
 concrete vs. formal abstract,
 84–87
 and flow, 111
 habitual, 20–21
 Training program, 4, 5, 68
 Transformative power, play as,
 133
 20/80 meetings, 15–17, 97
 Two-dimensional drawings,
 84–86

U

Union College, 218
 Unlocking:
 of connection between
 company/individual
 purposes, 19–20
 of knowledge in the room,
 17–18
 leadership in, 17–18
 of new knowledge, 87–93
 of understanding of the system,
 18–19

V

Van der Heijden, Kees, 160
 Van Vugt, Mark, 217
 Victor, Bart, 1–2, 4, 6, 114
 Video games, 113
 Virgin Group, 121
 “Vision Statement Development
 with LEGO SERIOUS
 PLAY” (Grienitz, Schmidt,
 Kristiansen, Schulte), 200

W

War games, 41–44
 Washburn, Sherwood, 89
 Weather Channel, 120
 Wheel, LEGO, 29
 Wilson, Frank, 90
 Work:
 meaningful, 219
 as putting solutions to use,
 135–137
 Working memory, 100
 Workshops:
 attention in, 99–100
 customization of, 208–209
 documenting results of, 138,
 139
 etiquette for, 68–74
 participants of, 135
 pitfalls in, 209–210
 serious play in, 134–141
 social dynamics in, 127
 success factors for, 53
 training for facilitating, 68
 World economy, 213