

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, 104–105
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

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

INDEX

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

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

INDEX

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

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

INDEX

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