TALK TO THE ELEPHANT

DESIGN LEARNING FOR BEHAVIOR CHANGE

JULIE DIRKSEN
CREDITS

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Ch 4, young male African elephant feeding, using trunk: Judy Whitton/Shutterstock
Ch 4, set of cartoon characters relaxing: zuperia/Shutterstock
Ch 4, seesaw - colored balance toy set: Peter Hermes Furian/Shutterstock
Ch 4, African elephant isolated on white: Vaclav Volrab/123RF
Ch 4, elephant: Richard Peterson/Shutterstock
Ch 4, the cigarette isolated on a white background: Voronina Svetlana/Shutterstock
Ch 4, fitness and health icons high detailed vector set: andegro4ka/123RF
Ch 4, copy document icon: Arafat Uddin/Shutterstock
Ch 4, elephant on a white background: sevenke/Shutterstock
Ch 4, glass of water spilled on wooden table: Africa Studio/Shutterstock
Ch 4, icons set fitness: Kapreski/Shutterstock
Ch 4, intimidating boot camp fitness trainer with adult class outdoors: CREATISTA/Shutterstock
Ch 4, Asia elephant on isolated white background: Judy Whitton/Shutterstock
Ch 4, a picture of an office worker: Kingmaya Studio/Shutterstock
Ch 4, performance evaluation form: alexskopje/Shutterstock
Ch 4, female college student meeting: Monkey Business Images/Shutterstock
Ch 4, smiling young African female entrepreneur: Flamingo Images/Shutterstock
Ch 4, happy mature business man: Rido/Shutterstock
Ch 4, happy mature business man holding spectacles: Rido/Shutterstock
Ch 4, well-dressed young Asian: mavo/Shutterstock
Ch 5, LED light bulb isolated on white: Robert Bertold/Shutterstock
Ch 5, young happy female coach: Drazen Zigic/Shutterstock
Ch 5, young happy female coach: Drazen Zigic/Shutterstock
Ch 5, young happy female coach: Drazen Zigic/Shutterstock
Ch 5, African farmer stand in the green farm: arrowsmith2/Shutterstock
Ch 5, a young Indian Asian woman: mentatdg1/Shutterstock
Ch 5, tired woman at home office looking at her watch: Leszek Glasner/Shutterstock
Ch 5, construction worker measuring tile: Africa Rising/Shutterstock
Ch 5, coach with digital tablet: Monkey Business Images/Shutterstock
Ch 5, Illustration of basketball: MSSA/Shutterstock
Ch 5, fit people ready to rock climb at the gym: Wavebreak Media Ltd/123RF
Ch 5, the American gray squirrel paw anxiously pressed to his chest: IrinaK/Shutterstock
Ch 5, dog resting at the river child drawing: s_oleg/Shutterstock
Ch 5, lesson class education study teaching concept: Rawpixel.com/Shutterstock
Ch 5, empty seesaw: Vaniato/Shutterstock
Ch 5, being rude, refusing help concept: KieferPix/Shutterstock
Ch 5, shot of a warehouse worker: Gorodenkoff/Shutterstock
Ch 5, worker with safety equipment: Kitawit Jitaton/Shutterstock
Ch 5, happy multiethnic family: Ground Picture/Shutterstock
Ch 5, beautiful lotus flower in waterfall pool. Vietnam: Khoroshunova Olga/Shutterstock
Ch 5, gesture of a beautiful woman hand washing her hands: caimacanul/Shutterstock
Ch 5, gloves, mask, and safety glasses for personal protection: Sherry Yates Young/Shutterstock
Ch 5, portrait of Asian female doctor wearing PPE suit: People Image Studio/Shutterstock
Ch 5, washing hands at sink: Stuart Cox/Pearson Education Ltd
Ch 5, no drugs concept vector illustration: Blueastro/Shutterstock
Ch 5, close up of African female athlete: koldo_studio/Shutterstock
Ch 6, graphic of the Behaviour Change Wheel: Springer Nature
Ch 6, young plant with watering can and water drops, isolated on white: Drogatnev/Shutterstock
Ch 6, hand holding (filming or shooting) a smart phone: piotr_pabijan/Shutterstock
Ch 6, Moe and their partner Kai: Disabled and Here
Ch 7, closeup portrait of handsome cocky guy with big black glasses: AshTproductions/Shutterstock
Ch 7, classic analog clock pointing at 8 o’clock: szefei/Shutterstock
Ch 7, Asian elephant female: Jan Havlicek/123RF
Ch 7, set of African American male hand: Prostock-studio/Shutterstock
Ch 7, organized tools on wall for maintenance: Mathisa/Shutterstock
Ch 7, waste recycling plant: Dmitry Markov/123RF
Ch 7, interior of a modern dental clinic: roboe/123RF
Ch 7, portrait of senior man gardener working with lawn mower: bambulla/123RF
Ch 7, young factory worker controlling the work: pressmaster/123RF
Ch 7, couple of surgeons washing hands: santypan/Shutterstock
Ch 8, portrait of medical team at nurses station: Monkey Business Images/Shutterstock
Ch 9, 10,11,12,14, multinational business team: Nadya_Art/Shutterstock
Ch 9, collection of people with pets: GoodStudio/Shutterstock
Ch 9, doctor checkup male patient in bed and nurse woman looking: Blaj Gabriel/Shutterstock
Ch 10, African elephant isolated on white: vencavolrab78/123RF
Ch 11, 12, African American black woman: Flash Vector/Shutterstock
Ch 11, rolled carpet isolated on white background: sereznij/123RF
Ch 11, Freedom Trail end at Bunker Hill Monument: alphostory/Shutterstock
Ch 12, professional workers standing together: elenabs/Shutterstock
Ch 12, yellow construction helmet four views isolated on white: Zelfit/Shutterstock
Ch 12, builders with building equipment and plan vector: Se_vector/Shutterstock
Ch 13, electrical shock hazard symbol: Anastasia Averina/Shutterstock
Ch 14, business multinational team: Nadya_Art/Shutterstock
Ch 14, group of multicultural students flat vector illustration: GoodStudio/Shutterstock
Ch 15, curriculum guide cover: Picture Impact, Julie Visco
Ch 15, empathy map: Picture Impact
Ch 15, women facing different paths: Picture Impact, Alfred Ombati
Ch 15, photo of classroom with different worksheet: Picture Impact
Ch 15, app screenshot of Sport integrity Australia: Commonwealth of Australia
Ch 15, Anti-Doping, screenshot of Sport integrity Australia: Commonwealth of Australia
Ch 15, screenshot of Sport integrity Australia, YouTube: Commonwealth of Australia
Ch 15, screenshots of Harness Hero game: Brian Kaleida, CEO of Sigma Games, LLC
Ch 15, screenshots of VALOR Nigeria Instagram feed: Manya Dotson
Ch 16, cuddling elephant and baby elephant: aiisha5/123RF
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# CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preface</td>
<td></td>
<td>IX</td>
</tr>
<tr>
<td>1</td>
<td>TALKING TO THE ELEPHANT</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>So Why?</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Aren’t People Just Stubborn/Clueless/Lazy?</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>How Does Learning Fit In?</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>What Else Matters?</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Meet the Elephant</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Who Are You Talking To?</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Talk to the Elephant</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Talk to the Rider and the Elephant</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>About the Examples in This Book</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Key Points</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>TAKING A SYSTEMS VIEW</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>“We Need Training”</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Systems Thinking</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Tuning a System</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>How This Impacts Behavior-Change Projects</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>How This Impacts Learning Design</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>Key Points</td>
<td>27</td>
</tr>
<tr>
<td>3</td>
<td>MOVING ALONG THE CHANGE PATH</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>How the Change Process Impacts Learning Design</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Approach 1: Design for the Whole Process</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Approach 2: Meet People Where They Are</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Approach 3: Leave Tools Along the Way</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Stages of Change</td>
<td>32</td>
</tr>
<tr>
<td></td>
<td>Change Ladder</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>The Learning Journey</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Key Points</td>
<td>46</td>
</tr>
<tr>
<td>4</td>
<td>COMMUNICATING VALUE</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>What’s It Worth?</td>
<td>47</td>
</tr>
<tr>
<td></td>
<td>Calculating Value</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>So How Does This Impact Training?</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>Key Points</td>
<td>78</td>
</tr>
</tbody>
</table>
## 5 UNDERSTANDING MOTIVATION

- They’re Just Lazy 82
- It’s Not About Motivating People 82
- Persistence of Motivation 83
- Intrinsic and Extrinsic Motivation 83
- Motivation Theory 86
- Motivation as a Continuum 91
- Strategies to Foster Motivation 104
- Talk to Your Learners 108
- Key Points 109

## 6 ANALYZING BEHAVIORS

- The Behaviour Change Wheel 111
- Specifying the Behavior 121
- COM-B 123
- Using COM-B to Analyze Behaviors 126
- Key Points 129

## 7 DETERMINING IF IT’S A TRAINING PROBLEM

- Diagnosis of the Problem: What Are the Causes, and Can Learning Help? 131
- Lack of Feedback 133
- Unclear Goals 136
- Unlearning an Existing Behavior 137
- Unawareness of Consequences/Bigger Picture 139
- Lack of Environment or Process Support 140
- Anxiety/Fear/Discomfort 142
- Lack of Confidence/Belief About Capabilities 144
- Mistrust 146
- Social Proof 147
- Lack of Autonomy/Ownership 148
- Learned Helplessness 149
- Misaligned Incentives 151
- Lack of Identity or Value Alignment 152
- Emotional Reaction 154
- Handwashing Total Up 156
- Example: Networking for College Graduates 156
- Key Point 158
CONTENTS

15 REAL-WORLD EXAMPLES 253
   Project 1: Building Women’s Entrepreneurial Skills in Rwanda 255
   Project 2: MindGym Leadership Development 262
   Project 3: Sport Integrity Australia—Anti-Doping Education for Athletes 265
   Project 4: A Digital App for BecomeAnEx.org (Part of the Truth Initiative) 271
   Project 5: Harness Hero and Behavior-Change Games 275
   Project 6: Project VALOR—Social Media Marketing to Promote Virtual HIV Consultation and Referral 279

CONCLUSION 289

INDEX 291
So, if you are viewing the preview pages for this book on a website or while you’re standing in a bookstore right now, you might be asking yourself if this book is useful for you. That is a fair question.

This book is intended for people who create learning experiences. Specifically, this is for people who are designing or creating or implementing learning experiences that are intended to change behavior.

This could be for just about anything. For example, these experiences could include

- A training program on safety procedures for food service workers
- A tutorial on a financial services website about how customers can save for retirement
- A class to help middle school teachers learn ways to support positive communication traits in their students
- A study skills online course for college students
- A community education class for seniors on maintaining strength and flexibility as they age
You might be noticing that this list is mostly about learning experiences for adults, and you’d be absolutely correct about that. I’ve been creating learning materials for about 30 years, and pretty much all of the projects I’ve worked on have been for adult audiences, either in workplace settings or higher education.

Although a lot of what I will discuss in this book could also be relevant for school-age kids, that’s not my area of expertise, so I won’t comment on how to translate any of this material for those age groups.

**WHO IS THIS BOOK NOT SO MUCH FOR?**

So, maybe knowing who the book is for has left you wondering who the book is not for. The contents may be helpful for other audiences, but it’s not really directed at

- **People who are trying to change their own behavior.** I’m sure that many of the strategies discussed in this book are relevant to people who are trying to make changes in their own lives, but that won’t be the focus.

- **People who are treating audiences with diagnosed conditions relating to mental or behavioral health.** For example, this book is not intended for therapists working with clients in a mental health setting. Again, some of the strategies may be useful, but this is not my area of expertise, and most of the solutions and strategies discussed have been designed for a general audience.

- **People who are working with kids.** As already mentioned, people who are creating educational materials for school-age children may find some useful ideas but would definitely need to filter it through their own expertise with the age group they work with.

**IS THIS BOOK FOR BEHAVIORAL DESIGNERS?**

As I’m writing this book, the field of behavioral design is rapidly expanding in organizations. Roles like “behavioral designer” and “behavioral strategist” are popping up in many organizations and consultancies (okay, at the moment, it’s mostly consultancies). While I don’t have any particular insight into how the field will evolve, I think it’s reasonable to suppose that training and instruction will continue to play a role in many behavior-change initiatives. This book is not intended to teach behavioral designers how to do instructional design, but it will have many options they may want to consider when part of their intervention relies on the creation of effective learning materials.
WHAT IS THIS BOOK TRYING TO DO?

Billions of dollars are spent every year on workplace training, and most of it is in service of training the participants to do something differently when they leave the training environment and go back to the workplace.

It’s not clear how much of this training is effective in supporting those behavior changes, but I don’t think it’s controversial to say that we could do better. Over the last dozen years, there has been an abundance of new research happening in the behavioral sciences, but not much of it has made its way into learning and development or higher education.

Additionally, training and education are often part of interventions designed by behavioral scientists, and integrating instructional design with behavioral design can help make those learning experiences more effective.

In this book, I share tools and strategies to help people create learning that supports behavior change. Here’s a brief overview of what you’ll find in each chapter:

- **Chapter 1, “Talking to the Elephant”:** I explain why the book is titled *Talk to the Elephant* and how we need to think about learning design differently when we are trying to help people with complex behavior-change challenges.
- **Chapter 2, “Taking a Systems View”:** Often behavior-change efforts require a very narrow focus on the behavior, but too narrow a focus can cause us to miss more systemic causes. In this chapter, I share examples of how to consider both the specific behavior and the broader systems that influence that behavior.
- **Chapter 3, “Moving Along the Change Path”:** Change is a process, not an event, and this chapter covers the stages of change and how you can support learners at different points in the change process.
- **Chapter 4, “Communicating Value”:** Most learning and development professionals are given the advice that they need to communicate WIFFM (What’s In It For Me), but often how we communicate value fails to achieve the desired outcomes. This chapter looks at how the elephant perceives value and how to craft messages to help the learners buy in to a behavior change.
- **Chapter 5, “Understanding Motivation”:** This chapter covers some of the most useful models of motivation and how to frame learning experiences to support intrinsic motivation, autonomy, and agency.
- **Chapter 6, “Analyzing Behaviors”:** I share how to frame, prioritize, and select behaviors and how to use the Behaviour Change Wheel and COM-B model to analyze a behavior.
Chapter 7, “Determining if It’s a Training Problem”: Often learning and development people are presented with problems to solve that aren't really training problems. In this chapter, I go through some of the most common issues that often get handed to us as training problems and examine what we can and cannot do for each.

Chapter 8, “Mapping to Solutions”: This chapter looks at how you take the COM-B analysis of the behavior and start to map your analysis to different types of behavior-change interventions.

Chapter 9, “Using Persuasion and Motivation Techniques”: This chapter looks at examples of behavior-change techniques that are related to persuasion and motivation.

Chapter 10, “Using Planning, Practice & Feedback”: This chapter looks at examples of behavior-change techniques that are related to planning, practice, and feedback.

Chapter 11, “Using Environmental and Social Support”: This chapter looks at examples of behavior-change techniques that are related to environmental and social support.

Chapter 12, “Values and Identity”: This chapter looks at examples of behavior-change techniques that are related to values, identity, and ownership.

Chapter 13, “Designing Responsibly”: This chapter looks at the ethical issues involved in behavioral design and at ways to ensure that you are designing as responsibly as possible.

Chapter 14, “Putting It All Together: A Case Example”: This chapter walks through an example of using all the tools I've discussed so far and applying it to a particular behavior-change challenge.

Chapter 15, “Real-World Examples”: To conclude the book, we hear from people who are doing behavioral learning design and examine different examples of the behavioral design process.

HOW DOES THIS MATCH UP WITH MY PREVIOUS BOOK?

First of all, if you are reading this book because you also read my book Design for How People Learn, then THANK YOU. I'm very happy to know that the first book was useful enough to bring you back.

This book is an expansion and elaboration on the motivation chapter and some other points in Design for How People Learn. It’s a deeper dive on the topics, and my rough estimate is that 10 to 20 percent of the material will sound familiar to readers of the
previous book, but if that’s not your experience, please let me know. All the words are new, but many of the principles have not changed between the two books, and I can’t assume a reader of this book has also read the other book, so there will be some necessary repetition.

**WHO AM I TO WRITE THIS BOOK?**

When people ask me what I do, I usually say, “I’m an instructional designer.” Most of the time (like, 99 percent), this provokes a slightly puzzled head tilt and a hesitant, “Okay...?” (Other instructional designers know what I’m describing.) My degree is in “Instructional Systems Technology,” and I’ve worked for almost 30 years on the design of learning materials and experiences for adults. I also spent about half my time in graduate school studying human-computer interaction (or what we now more commonly call UX (User Experience) design).

I became interested in behavioral design in the early 2000s because I felt like there was a gap in my toolbox, but I’ve spent the last dozen or so years educating myself on the principles and models of behavioral design via books, media, research papers, practical application, and formal workshops.

Many of the books on behavioral design come from academic researchers, and it’s great that so many of them are able to translate their work for more general consumption. It can be difficult, though, to take even the best written books on behavioral science and connect those to practical guidance in an applied domain. I’m not a researcher; I’m very much a practitioner who tries to translate research into practical application. I try to approach all of these topics with humility and strongly encourage you to test any recommendations or solutions with your audience in your context. Just because something worked in one context doesn’t mean it will work for you, but these concepts and models do give you a place to start.

Thanks for considering this book, and best of luck.

Materials and resources to support this book can be found at usablelearning.com/elephant
“WE NEED TRAINING”

When a system fails, “training” is almost always promised as part of the solution. Here are some examples:

- In 2018, Starbucks Coffee Company—in response to complaints about discriminatory actions from Starbucks employees—closed approximately 8,000 Starbucks locations for a day and had roughly 175,000 employees participate in “racial-bias education geared toward preventing discrimination in our stores.”
- Police officers spend thousands of hours every year in “Use of Force” classes aimed at teaching them how to not use unnecessary or excessive force.
- Billions of dollars are spent every year on things like “leadership” training.

It’s not difficult to see that for each of these, training is likely only a small fraction of what is needed to truly make significant change.

LEARNING AS PART OF A SYSTEM

There’s a quote that I’m a bit obsessed with (attribution is a bit murky, but a likely originator is Paul Batalden based on ideas from W. Edwards Deming, a well-known engineer and management consultant):

*Every system is perfectly designed to get the results it gets.*
Whenever we are dealing with a problem, challenge, or difficulty, it’s always worth asking these questions:

- What is it about the system that is causing an outcome?
- And how is the system influencing the behavior of the people in that system?

When we attribute outcomes to people’s attitudes or capability (for example, “They’re just lazy”), we miss the crucial point that there’s usually a reason for someone’s behavior, and if we don’t ask what that reason could be, we are missing vital data that could help change the situation. A behavior can be “wrong” according to standard operating procedures and still be right in the sense that there is some functional reason in the environment or system for that person’s behavior.

For example, a store clerk might guess the price of an item rather than holding up a large line of customers while they go through the official process of getting the price checked. Some stores recognize that a very strict adherence to a procedure like price checking can compromise bigger goals like good customer experience, so they deliberately give clerks latitude about using judgment for small-stakes items in service of that better customer experience.

**IRRATIONALITY AND BIAS Exists IN SYSTEMS**

Much has been made of irrationality and bias when it comes to behavior change. There are impressive infographics that show all the cognitive biases. Several books have been written about the quirks of human irrationality. These are often interesting and entertaining, and there are important things we can learn from them, but they aren’t always useful. Looking at these biases as interesting phenomena ignores the fact that they’re related to the context and environment in which they occur.

Daniel Kahneman (the winner of the Nobel Prize for his contributions to behavioral economics), in his seminal text *Thinking, Fast and Slow*, explains a riddle that they used to test what he describes as people’s “Lazy System 2”:

A bat and ball cost $1.10.

The bat costs one dollar more than the ball.

How much does the ball cost?

Many people answer 10 cents. The actual answer is 5 cents, with the bat costing $1.05 (one dollar more than the ball). In his book, Kahneman describes how System 2 “allocates attention to effortful mental activities that demand it, including complex computations,” but goes on to explain that “The distinctive mark of this easy puzzle is that it evokes an answer that is intuitive, appealing, and wrong.” This is
Kahneman’s “Lazy System 2.” By not paying appropriate attention, many people get this answer wrong.

So let’s look at how this question appears to the elephant:

• **It’s clearly historical.** Baseballs and bats cost much more now, and this is presented as a puzzle. It’s not a real, immediate problem with any real stakes to it, and so the signal to the elephant is *it kind of doesn’t matter*.

• **It’s an odd format.** If I wanted to know the price of an item, I would never ask it in this format, nor would I expect anyone to ever give me this piece of information for two unsimilar items (item one costs much more than item two). For example, if I was splitting a check with someone, I might compare the price of two similar items (for example, two glasses of wine), but I would never tell anybody, “My entrée cost $28 more than your dessert.” The deliberately confusing format tricks the elephant.

• **It’s close to a format we are used to.** A much more common conversation might be “Q: How much was the ball?” “Answer: Well, it was a $1.10, and the bat was $1.00, so...” You’ve probably had versions of that conversation many times in your life. You may never have had a question in the format of the example from Kahneman’s book.

• **It’s trivial.** The difference between the right answer (the ball is 5 cents) and the intuitive answer (10 cents) is trivial for most people, so this is something where the consequences of getting it wrong just don’t matter very much, so it makes sense that people would not allocate a lot of effort to figuring it out. This is also a cue to the elephant that the answer isn’t particularly important.

So this example has several cues to the elephant that a quick guess will be sufficient here, and whether you consider that laziness or efficiency depends on your perspective.
There’s probably no shortage of people who would point out (with some ire) to me that it’s still wrong. And they would be correct about that, and I’m not suggesting that it doesn’t matter that people get it wrong. But if we ask ourselves the reasons that they got it wrong—it’s a weird format no normal person would ever use, and all the cues are telling our brains that this is a problem not worth a lot of attention, with low stakes if you get it wrong—we know a lot more about how to recognize situations where people need to heighten their attention or risk error, and how to help people avoid those errors.

**SYSTEMS THINKING**

So how do we take into account all the other variables that exist in the environment and consider them as we discuss a behavior? We are going to zoom in to focus on very specific behaviors in later chapters of this book because that sharp focus helps us analyze and diagnose, but a too-narrow focus can also cause us to miss other causes and solutions.

Donella Meadows, author of the classic book *Thinking in Systems: A Primer*, describes a system as “A set of things—people, cells, molecules, or whatever—interconnected in such a way that they produce their own pattern of behavior over time.” Trying to understand the complexity of a whole system can be overwhelming, but being able to both focus on individual behaviors and keep in mind the overall system is a necessary balancing act for any serious behavior change effort.

For example, we know that plastics cause many ecological issues, so you could have a narrow focus on the behavior “People need to recycle consistently and correctly.” But it’s worth asking if that narrow behavior will make a big enough change. Maybe people recycling more frequently and accurately will change things significantly, but we probably need to look at the bigger system and consider variables like the cost and availability of recycling facilities, the market for recycled plastics, the incentives for manufacturers to use less plastic, and so on.
One tool we can use to consider how a system works is system mapping. There’s no single way to do this kind of mapping, and I’m only going to use the simplest examples here. Peter Senge’s *The Fifth Discipline* and Donella Meadows’s *Thinking in Systems* are both excellent books if you’d like to explore this further.

Peter Senge explains that the building blocks are reinforcing processes, balancing processes, and delays. Let’s look at a reinforcing process. If you’ve been in the world of learning and development or higher education for any time, you are probably very familiar with the “end of class survey.”

The illustration shows how this should probably work. Evaluation data should be used to improve classes, which will then improve the evaluation scores.

Eventually the system will balance out when the evaluation data and the class quality can’t get any higher. Everybody wins!

That’s how it theoretically *should* work. It often doesn’t go quite like that. I’ve seen organizations where it goes something like this:
Yep, the evaluation data is collected, but then doesn’t go anywhere, except into the metaphorical ether.

If a system is supposed to work a particular way, and it’s not, then it’s worth asking “why not?”

You can tug on each of these threads and, for example, ask why the data isn’t actionable or who should be responsible for paying attention to the data.

Let’s say that you are managing the training function, and you decide the team will evaluate all the evaluation data and allocate resources to improve the classes, which hopefully improves business results. That sounds pretty good! But, of
course, other things are involved, like resource allocation to new projects, stakeholder support, and so forth. If you think about how these all interact, it can get complicated quickly:

If we try to figure out how these things interact, we might find that the assignment of resources to improve existing classes doesn’t come with an overall increase in team resources, so they have to be pulled from somewhere. That means fewer resources for new training projects, which makes some stakeholders unhappy and leads to a decrease in business results from new projects. And the unhappy stakeholders decrease their funding support, so now you can’t fill the open staff position you were counting on to support the improvements.

Thinking through these relationships can help you identify key places in the system where you can intervene and adjust to make beneficial changes.

A system view can help show where there isn’t enough reinforcement, where there are unintended effects, or where difficulty seeing feedback can be causing problems.

**UNINTENDED CONSEQUENCES**

Any behavior change intervention can have unintended consequences. For example, the intended consequences for most compliance training efforts are outcomes like employees not doing things that are illegal or problematic, or legal defensibility if the company is sued.

But if we create compliance training that isn’t relevant to the audience, and the message is that you just need to tick the completion box, then we may not like the
unintended consequences of forcing compliance training where it’s not relevant or useful.

I talked to Christian Hunt, author of *Humanizing Rules: Bringing Behavioural Science to Ethics and Compliance*, and he described it this way:

> It used to frustrate me in banking when my assistant had to do training on obscure regulations that made no sense to her whatsoever. It was not relevant to her job. And so she would sit there and go, “Oh, it’s another one of those things from the people who brought you the tedious trade course.” So even when it was relevant, she would sit there and go, “Here’s more useless stuff from those idiots that don’t understand me, I’m going to ignore it.” We are teaching people to ignore our training.

I think the key bit with all of this is that we’re dealing with human beings that are sentient. And so they will react to what they see us doing. Attempts to assess whether our training has been effective needs to bear in mind that the test itself sends a signal to employees. If you teach them something you say is important, but then if the assessment is dumb—you tell them to just regurgitate what they’ve just been told or give them an “everybody knows this” kind of test—that’s not a genuine test of whether they know it, and they’ll recognize that. And so in trying to test the effectiveness, we often actually make the situation worse and we undermine the subject matter in the tests.

**WHERE DOES FEEDBACK BECOME VISIBLE?**

Often, in a behavior-change project, we decide that a set of behaviors will produce the desired outcomes. At that point, it’s worth asking, “Where do the consequences of a behavior becomes visible?”

Here are some example behaviors:

- Salespeople should increase their sales of the turbowidget (desired result: increased turbowidget sales).
- Hospital healthcare providers should wash their hands according to governmental guidelines (desired result: decreased patient infections).
- Jan needs to buy extra milk while her brother and nieces are visiting (desired result: there will be enough milk for breakfast and other meals).
- Managers need to ensure that salary offers to new hires are fair and equitable (desired result: staff will be paid appropriately for their qualifications and responsibilities).
Results of behaviors can become visible at very different levels. I usually use the distinction of individual, group, and system levels.

INDIVIDUAL-LEVEL CONSEQUENCES
Jan’s behavior will be visible at the individual level. She’ll be able to see whether they have enough milk or she needs to buy more. The behavior and consequences will be pretty easy to see at the individual level:

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan buys one liter of milk</td>
<td>They run a little short at breakfast.</td>
</tr>
</tbody>
</table>

The same thing is probably true with the sales example. Most organizations track sales results at the individual level, so we can see how a particular salesperson did, as shown in the illustration.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salesperson A sells Turbowidgets</td>
<td>Salesperson A sells 180% of goal for Turbowidgets.</td>
</tr>
</tbody>
</table>

So buying milk and selling Turbowidgets both have a visible outcome at the individual level.

GROUP-LEVEL CONSEQUENCES
Sometimes, evaluating the outcome can require comparison across a group. For example, selling 180% sounds great, but if everybody does exactly the same, then it’s less impressive. But if most other people on a sales team sell around 100% of goal, then 180% is going to be exceptional.

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salesperson A sells Turbowidgets</td>
<td>The whole team, does okay, but Salesperson A crushes the sale goal for Turbowidgets.</td>
</tr>
</tbody>
</table>
In most healthcare facilities, the consequence of handwashing is very difficult to measure at the individual level. It would be extremely unlikely that a patient only has contact with a single healthcare provider in a hospital setting. Impact would really only be visible at a group level.

Since it’s pretty much impossible to see the consequence at the individual level, the consequence has to be examined at the group level, but that might not be enough data for comparison either.

If a manager is hiring a new employee, that manager might have all sorts of reasons for the salary offer being 15% less than the person currently doing the job. The new person might have less experience or different qualifications, or the current employee might have been in the job for several years and received merit increases over the years.

A manager might be able to judge the fairness of a salary offer against several other people in the department doing the same work with similar qualifications, or they might not have anyone else in that same role.

So, sales goals, handwashing, and salary offers need comparison or aggregate data to be relevant. We need to have some basis for comparison to know if the rate of sales or patient infections are good numbers, and a single salary offer can’t be judged equitable without comparing it to similar offers.

**SYSTEM-LEVEL CONSEQUENCES**

Sometimes consequence can be judged only at the level of whole systems. A hospital might not know whether its infection rates are excessive without being able
to benchmark against similar hospitals or national averages. Behavior changes that focus on changing the individual will be easiest when the results or consequences are visible at the individual level.

When you are being asked to design learning for a behavior change where individual learners can't see any feedback because there are no systems in place to measure at the group or system level, it’s important to recognize that this will be a difficult and uphill battle, and you should make stakeholders aware that training alone will probably not be enough to support change.

For example, it can be very difficult to judge the fairness of a job offer without more data than most hiring managers have access to.

THE EXAMPLE OF PAY EQUITY
The company Salesforce.com set out to look at salary disparities. In an article in Wired magazine, Salesforce.com CEO Marc Benioff and two members of the senior executive team, Cindy Robbins and Leyla Seka, raised the issue of gender pay equity and proposed an audit of compensation for all employees. Benioff described how they had been working on equity initiatives for a few years at that point, so he didn't expect the audit to show much disparity.

It wasn't simple to look at the data. They “assembled a cross-functional team and developed a methodology with outside experts that analyzed the entire employee population to determine whether there were unexplained differences in pay.” Benioff was chagrined to discover that there were significant disparities and that 6% of Salesforce.com employees needed their salaries adjusted, at a cost of approximately $3 million. They found that the next year, they had to perform a similar adjustment (mostly due to acquiring companies who brought their own salary disparities to the organization). The company discovered this would be an ongoing effort and publishes an annual update on their website regarding goals and progress.

Benioff describes how this is not the product of deliberate bad actors in the system. No bad person is scheming to pay people less based on race or gender. He describes pay inequity as “a stubborn, slippery problem in business.” He also explains that the reasons to fix it aren’t about reputation or even doing the right thing, but that diversity and equity are good for business, according to research from McKinsey & Company and others.

The point of this example isn’t to promote pay equity (though I’m a fan), but to show how a focus on individual behavior would be inadequate here. I’ve worked on
many diversity training projects over the years, and the training has had learning objectives like

Managers will be able to describe the importance of fair and equitable treatment.

Or even

Managers will be able to identify the characteristics of a fair and unbiased salary offer.

But in the Salesforce.com example, they were unable to see the problem clearly without a system in place to measure and correct for the issue. After the initial audit, they “devised a new set of job codes and standards and applied them to each newly integrated company.” With those measures in place, it might be possible to address the problem at an individual level, as disparities against those standards would be visible on an individual basis.

TUNING A SYSTEM

Behavior change initiatives are often treated as a campaign, a class, or an event, but in the Salesforce.com example, they found that one correction was not enough. Instead, they have built up ongoing systems and publicly release their outcomes every year on their website.

We tend to view training classes as a Start > Learn > Finish process. You now know the thing you needed to learn and move on to the next thing or go out and use your knowledge.

Behavior change efforts may not always work like that. It may be an ongoing effort to reinforce and adjust. The metaphor may not be a journey, but more of a garden that needs tending as it grows or a thermostat that needs adjusting over time.

If that’s too vague, we can use the example of cybersecurity. The behavior is that learners should create strong, unique passwords. There’s a class that’s really fun and engaging, and people come up with the hardest passwords they can imagine, and everybody leaves ready to do the right thing. That lasts for maybe six weeks or so, and then the behavior of weaker, reused passwords starts to creep back in.

I don’t want to get into solutions here, but there are many kinds of behaviors that may never be a one-and-done training solution.
HOW THIS IMPACTS BEHAVIOR-CHANGE PROJECTS

If you are being asked, as a learning designer, to design a class or resources to help address individual behaviors in a system where results are not visible at an individual level, it probably won’t be enough. It doesn’t mean that you shouldn’t try or that it can’t be part of the solution, but it may be useful to have that discussion with stakeholders so the expectations are set appropriately.

- Teaching healthcare providers how to talk to patients about exercise won’t help if providers aren’t given the time to have those conversations.
- Teaching people the right method for handwashing will be of limited usefulness if the environment lacks clean water and adequate supplies.
- Teaching people to sort their recycling won’t make a dent in plastic going to landfills if there’s no market for recycled goods.

Please understand that I do not mean this in a pessimistic way! As we proceed in this book, I’m going to speak optimistically about our ability as learning designers to impact or influence behavior. I wouldn’t be writing this book if I wasn’t optimistic about this topic. That said, I want to be as clear as possible about the limitations of a tight behavioral focus, how solutions may often need to be part of a broader system approach, and how learning designers should also be part of those broader systems discussions.

HOW THIS IMPACTS LEARNING DESIGN

I started this chapter talking about how training often gets invoked to help solve large systemic problems. Let’s take a look at a small example of making biased judgments.

You’ve probably heard the message that it’s wrong to judge people based on their appearance. “Don’t judge a book by its cover” and all that. Sesame Street made sure my four-year-old self knew that judging people based on how they looked was bad. And it’s not difficult to look at the news and see examples where judging by appearance leads to awful consequences. Making people aware of unconscious bias is a large part of many training initiatives.

But imagine you live in an apartment building, and a delivery person contacts you over the intercom to let you know that you have to sign for a package you ordered. You walk into the lobby and see these three people:
I don’t think you would be guilty of any problematic bias or irrationality if you walked up to the person in the uniform holding a delivery box.

The point isn’t that “judging by appearance” is okay. The point is that sometimes it’s okay and sometimes it’s not, and the hard part is knowing the difference.

So the learning objective isn’t helping learners understand that “this bias exists.” The learning objective is helping learners “recognize in which environments and circumstances I need to use extra vigilance to make sure I’m not making unfair assumptions.”

The first is an interesting psychological phenomenon that you tell the rider about, and the second is a skill or habit you probably need to practice consistently to help the rider and elephant both develop.

This is an important distinction for learning design, because the learning design will look very different. If you are describing an interesting phenomenon, you might only need a single slide in the presentation deck, but helping people develop a skill or habit requires learning activities with practice, a feedback mechanism, and reinforcement over time.
Learning where and when you need to heighten your vigilance is a product of the environment you are in, the influences that shaped your learned behavior, and the cues you have acclimated to.

The behavior, like the elephant, never exists in a vacuum. The elephant is always operating in the social and physical environment it exists in. We need to consider these things if we want to design effective learning experiences.

**KEY POINTS**

- Training is often called upon to provide solutions to difficult problems, but there are often bigger system issues at play, and an intervention that only focuses on training is often not enough.
- Every system is perfectly designed to get the result it gets, so always ask, “What is causing this behavior to happen or not happen right now?”
- If a behavior is being blamed on attitude or capability, it's important to dig deeper and see if there's anything in the system or environment that is causing that behavior to happen.
- Mapping a system, and considering what forces are encouraging the change and what forces are restraining the change, can help you identify the best places to intervene in that system.
- A tight focus on individual behavior can help you design for behavior change, but you do need to periodically zoom out and consider the whole system to ensure that the individual behavior supports the outcome.
- Always ask where the feedback or consequences of the behavior will become visible. If it’s visible at the individual level, it will be easier to provide feedback to individual learners. If the feedback only becomes visible at the group or system level, then there will need to be mechanisms in place to measure and assess group- or system-level impact.
RESOURCES
A
acceptability (APEASE criteria), 118
accountability, 44
action planning
BCT 1.4, 187
BCT 3.2, 208
affordability (APEASE criteria), 119
Allen, Michael, 11
amotivation, 92
analysis, ethical issues and, 227
analysis research, audience, 253
anticipated regret (BCT 5.2), 175
anxiety/fear/discomfort, behavior change and, 142–144
APEASE, behavior prioritizing, 118–119
rating behaviors, 119–120
dealbreakers, 120
spillover behaviors, 120
associations (BCTs), 165, 207
audience
analysis research, 253
bias in, 230
eliciting from, 42
ethical issues, 227–228
effect on participants, 228
identity, 212
meeting them where they are, 31
retirement planning example, 168
support and, 202
values, 212
automaticity, 190–192
autonomy
behavior change and, 148–149
motivation and, 86–87
avoidance/reducing exposure to cues for the behavior (BCT 12.3), 180

B
Bailey, Sebastian, 262–265
balancing processes, 17
barriers, perceived, 77
BCTs (Behaviour Change Techniques), 176
action planning
1.4, 187
3.2, 208
adding objects to environment (12.5), 206
anticipated regret, 175
associations, 165
avoidance/reducing exposure to cues (12.3), 180
behavioral contract (1.8), 188
behavioral experiments (4.4), 197, 208
behavioral practice/rehearsal (8.1), 192, 209
behavior substitution (8.2), 198
case example, 247
commitment (1.9), 188
comparative imagining of future outcomes (9.3), 177
comparison, 176, 178
counter of behaviors, 165
counter of outcomes, 165
contracts and commitment, 188
cover learning, 166, 179
credible source (BCT 9.1), 177, 209
demonstration of behavior (6.1), 176
discrepancy between current behavior and goal (1.6), 195
environment (12.1), 179, 166
environment restructure (12.1), 223
feedback and monitoring, 165
feedback on behavior (2.2), 196
focus on past success (15.3), 178
framing/reframing (13.1), 220
goal setting behavior (1.1), 179, 185, 224
goals and planning, 165, 185
graded tasks (8.2), 185
habit formation (8.3), 192
habit reversal (8.4), 198
identity, 166, 214–223
  associated with changed behavior (13.1), 222
imaginary reward (16.2), 179
incompatible beliefs (13.1), 221
information about other’s approval (6.3), 177
instruction on how to perform behavior (4.1), 184, 204, 214
learning experience design, 184–188
mental rehearsal of successful performance (BCT 15.2), 178
mental resources, conserving (11.3), 223
monitoring without feedback (2.1), 196
natural consequences, 165
problem solving and action planning, 187
prompts/cues (7.1), 198, 207
pros and cons (9.2), 177
reduce negative emotions (11.2), 222
regulation, 122, 166
repetition and substitution, 165
restructuring physical environment
  1.6, 200
  12.1, 206
restructuring social environment (12.2), 206, 210
retirement planning example, 170–172
review behavior goal(s) (1.5), 195
reward and threat, 166
reward removal (14.3), 210
scheduled consequences, 166
self-as role model (13.1), 220
self-belief, 166, 178
self-monitoring (2.3), 196
self-monitoring of outcomes (2.4), 197
shaping knowledge, 165
social comparison (6.2), 176
social support (3.2), 165, 198
  practical (3.2), 208, 223
  unspecified (3.1), 207
valued self-identity (13.1), 221
verbal persuasion about capability (15.1), 178
BecomeAnEx.org, 271–275
behavior
  change, learning and, 3
  character and, 3
  performance instruction, 204
  performance instruction (BCT 4.1), 214
  prompting, 45
  systems and, 14
  values, learning experiences and, 108
behavioral contract (BCT 1.8), 188
behavioral experiments (BCT 4.4), 197
behavioral practice/rehearsal (BCT 8.1), 192
behavioral solutions, characteristics, 253–254
behavioral statements, 121
behavior change
  anxiety/fear/discomfort and, 142–144
  assets, 264
  autonomy and, 148–149
  confidence level and, 144–145
  consequences
    group level, 21
    handwashing example, 173–174
INDEX

individual level, 21
retirement planning example, 171–172
salience, 172–175
system level, 22
unintended, 19
emotional reaction and, 154–156
environment and, 140
ethical issues, 226
analysis, 227
design, 229–230
evaluation, 231
implementation, 230–231
interests, alignment, 227
participant protection, 228
problem definition, 226
solutions, 228–229
feedback and, 195–197
visibility, 20
identity and, 152–154
implementation intentions, 187
incentive alignment and, 151–152
learned helplessness and, 149–151
mistrust and, 146–147
monitoring and, 195–197
networking for college graduates, 156
ownership and, 148–149
problem diagnosis, 132–133
retirement planning example, 170–171
social proof and, 147–148
systems tuning and, 24–26
values and, 152–154
behavior goals, 195
behavior modeling, anxiety/fear/discomfort and, 143
behaviors
automaticity, 191–192
case example
  brainstorming, 237–241
defining behaviors, 241
  selecting, 235–237
defining, 114–115
goals and, 113–114
identifying, 115
  brainstorming, 117
  expert input, 116
  positive deviants, 118
  regular performers, 117
  star performers, 117
prioritizing. See APEASE criteria
stories and, 216
unlearning, 137
  handwashing example, 138
  practice opportunities, 138
unlearning, training and, 138–139
versus outcomes, 199
behavior substitution (BCT 8.2), 198
Behaviour Change Wheel, 111. See also COM-B Model
Better (Gawande), 90
bias in pilot audience, 230
bias in systems, 14
brainstorming, identifying behaviors, 117
Building Autonomous Learners (Reeve), 104

call to action, 78
capabilities
  BCTs, 178
  COM-B model, 123
case example, 246, 247
case examples, 234
  BCT (Behaviour Change Technique), 247
behaviors
  brainstorming, 237–241
defining, 241
  selecting, 235–237
blocks, 243
capability, 246–247
challenge, 234–235
coaching, 250
COM-B considerations, 244
evaluation, 252
feedback, 250
format, 251
implementation, 251–252
interventions, 245
job aids, 250
just-in-time learning, 250
learning/prelearning, 249
learning strategies, 249
mentoring, 250
motivation, 247–248
opportunity, 246–248
practice, 250
refreshing activities, 250
research and analysis, 242
resources, 250
training, 243
change ladder, 35–40
change process
  learning design and, 29–35
    change ladder, 35–40
character, behavior and, 3
Chard, Shelly, 265–271
The Checklist Manifesto (Gawande), 44
checklists, 44
coaching, 43
  case example, 250
code documentation example, 41–45
coding interviews, 272
coercion as intervention, 163
cognition, low road/high road, 7
cognitive spacing, 45
COM-B, 263
  case example use, 244
identity, 213
values, 213
COM-B analysis
  learning experience design product options, 183
  retirement planning, 169–170
  support, 203
COM-B model, 111, 123
  behavior analysis, 126, 128–129
  capability, 123
    physical, 123
    psychological, 123
  intervention types, 161
    coercion, 163
    education, 161
    enablement, 164
    environment restructure, 162
    incentivization, 163
    mapping to, 164
    modeling, 162
    persuasion, 162
    restriction, 163
    training, 162
  motivation, 126
    opportunity, 124–125
  commitment (BCT 1.9), 188
communication
  feedback, nonjudgmental, 107
  jargon avoidance, 106
  learner input on design, 108
  strengths-based language, 106
  value, 48
comparative imagining of future outcomes (BCT 9.3), 177
comparison of behaviors (BCTs), 165, 176–177
comparison of outcomes (BCTs), 165, 176–177
competence, motivation and, 90
confidence level
  behavior change and, 144–145
  training and, 145
consequences of behavior change
- awareness of, 139
- group level, 21
- handwashing example, 173–174
- individual level, 21
- introjected regulation, 97
- retirement planning example, 171–172
- salience, 172
  - handwashing example, 174–175
- system level, 22
- training and, 140
- unintended, 19, 226
contracts and commitment, BCTs, 188
Cooper, Alexis, 265–271
c covert learning, BCTs, 166, 179
credible source (BCT 9.1), 177, 209
critique, interview steps, 186
cues (BCT 7.1), 198
cycles of expertise, 43

dark patterns, 229
data collection, 261
  - privacy issues, 231
decision making, motivation and, 87
defining problems, 253
delayed rewards, value and, 57–62
delays, 17
demonstration of behavior (BCT 6.1), 176
developing further, 45
discrepancy between current behavior and goal (BCT 1.6), 195
DiTommaso, Dustin, 271–275
Dombrowski, Roberta, 254
Don't Mess with Texas campaign, 219
Dotson, Manya, 279–287

E ease of use, value and, 77
ease, practice and, 189, 192
education as intervention, 161
effectiveness (APEASE criteria), 118
effort, value and, 49, 51
elephant metaphor, 5, 7
  - as audience for learning experience, 8
  - audience focus and, 11
  - motivation, 10
  - rider, 6
emotions
  - behavior change and, 154–156
  - learning experiences and, 9
  - negative (BCT 11.2), 222
enablement as intervention, 164
environment (BCT 12.1), 166, 179
  - adding objects (BCT 12.5), 206
  - behavior change and, 140
  - physical, restructuring, 206
  - restructuring (BCT 12.1), 223
  - social, restructuring, 206
  - support and, 204, 206
environmental restructuring as intervention, 162
equity (APEASE criteria), 119
ethical issues, 226
  - analysis, 227
  - audience, 227–228
    - effect on participants, 228
data collection, 231
design
  - dark patterns, 229
testing, 229
evaluation, 231
implementation and, 231
disclosure, 231
monitoring, 230
interests, alignment, 227
participant protection, 228
problem definition, 226
solutions, 228–229
evaluation, 17
case example, 252
measurement, 254
examples in book, 11
expertise, cycles of, 43
external regulation, motivation and, 94
mandatory learning, 96–97
professional development, 96–97
reactance, 97
wellness gift cards, 95
extrinsic motivation, 83, 85

feedback, 43, 195–197
as training problem, 135
BCT 2.2, 196
case example, 250
effects on training, 135
handwashing example, 133
lack of, 133
nonjudgmental, 107
practicing, 135
tools, 135
value and, 78
visibility, 20
feedback and monitoring (BCTs), 165
The Fifth Discipline (Senge), 17
Flamholtz, Eric, The Inner Game of Management, 87
focus groups, 259
focus on past success (BCT 15.3), 178
framing/reframing (BCT 13.1), 220

G
Gawande, Atul
The Checklist Manifesto, 44
Better, 90
goal setting (BCT 1.1, BCT 8.2), 179, 185, 224
behaviors and, 113–114
consequences, unintended, 226
current behavior discrepancy and, 195
defined, 136
motivation and, 105–106
reviewing, 195
stakeholders and, 112
training and
illustrating, 137
learning activities, 137
performance goals, 137
rubrics, 137
user research, 256
graded tasks in learning environments, 185
group level behavior change, 21

H
habit formation (BCT 8.3), 192
supporting, 193
versus routines, 193
habit labs, 265
habits
learning experiences, 9
reversing (BCT 8.4), 198
Haidt, Jonathan, The Happiness Hypothesis, 5
handwashing example
anxiety/fear/discomfort and, 143
autonomy and, 149
behavior change, environment and, 141
confidence level and, 145
consequences, 173–174
salience, 174–175
consequences, awareness of, 140
emotional reaction and, 155
feedback and, 133
goals, defining, 136
identity and, 153
incentives and, 151
learned helplessness and, 150
learning objective, 132
mistrust and, 146
ownership and, 149
social proof and, 148
unlearning behaviors, 138
values and, 153
highly regulated environments, motivation and, 87–89
Hunt, Christian, Humanizing Rules: Bringing Behavioural Science to Ethics and Compliance, 20
identified regulation, motivation and, 101–102
identifying behaviors
brainstorming, 117
expert input, 116
positive deviants, 118
regular performers, 117
star performers, 117
identity, 211
audience, 212
BCTs (Behaviour Change Techniques), 166, 214–223
behavior change and, 152–154
changed behavior association (BCT 13.1), 222
COM-B analysis, 213
Don’t Mess with Texas campaign, 219
I don’t versus I can’t, 218
smoker/nonsmoker, 219
stories and, 216
I don’t versus I can’t identity, 218
imaginary reward (BCT 16.2), 179
immediacy, value and, 56–57
delayed rewards, 57–62
immediate use, 63
implementation, 254
behavior change and, 187
unlearning behaviors and, 138
impulses, learning experiences, 9
incentives
behavior change and, 151–152
versus rewards, 199
incentivization as intervention, 163
incompatible beliefs (BCT 13.1), 221
individual level behavior change, 21
information about others’ approval (BCT 6.3), 177
The Inner Game of Management (Flamholtz), 87
instruction on how to perform behavior (BCT 4.1), 184, 204
integrated regulation. See identified regulation interventions, 161
case example, 245
coercion, 163
education, 161
enablement, 164
environment restructure, 162
incentivization, 163
mapping to, 164
modeling, 162
persuasion, 162
restriction, 163
training, 162
interviews
Bailey, Sebastian (MindGym), 262–265
Chard, Shelly (Sports Integrity Australia), 265–271
Cooper, Alexis (Sports Integrity Australia), 265–271
DiTommaso, Dustin (meQuilibrium), 271–275
Dotson, Manya (Jhpiego), 279–287
Kaleida, Brian (Simcoach Games), 275–279
Martin, Anna (Picture Impact), 255–262
Mitchell, Katrina (Picture Impact), 255–262
intrinsic motivation, 83–84, 102
introjected regulation, motivation and, 97–99
timesheets example, 98
training and, 100
irrationality in systems, 14

J
jargon, 106
Jhpiego, 279–287
job aids, 44, 250
justification, overjustification effect, 94
just-in-time learning, 44
case example, 250

K
Kahneman, Daniel, Thinking, Fast and Slow, 7
Kaleida, Brian, 275–279

L
Land O’Lakes Venture 37, 255–262
Lazy System 2, 14–15
learned helplessness, behavior change and, 149–151
learners
choice, 104
input on design, 108
myths about, 82
learning
active learning, 42
audience focus, 11
behavior change and, 3
change process, 29–40
eliciting from audience, 42
environments, graded tasks, 185
just-in-time learning case example, 250
prelearning, 249
using examples, 42
learning experiences
audience, 7–8
BCTs, 184–188
behavior and values, 108
biases, 10
educational systems, 2
elephant rider and, 7–8
emotions, 9
following through, 1
habits, 9
impulses, 9
personal experiences, 9
visceral experiences, 9
learning strategies case example, 249
Learn Mindfully, 254
leveling up, 43
likelihood, value and, 69
personal experience and, 69–72
low-literacy learners, 260
low road/high road cognition, 7

M
managers, support for, training and, 136
mandatory learning, external regulation, 96–97
Martin, Anna, 255–262
Meadows, Donella, Thinking in Systems: A Primer, 16
measurement, 254
memory, practice and, 189–192
mental rehearsal of successful performance (BCT 15.2), 178
mental resource conservation (BCT 11.3), 223
mentoring, 43
  case example, 250
meQuilibrium, 271–275
Michie, Susan, 111
MindGym, 262–265
mistrust
  behavior change and, 146–147
  training and, 146–147
Mitchell, Katrina, 255–262
modeling as intervention, 162
monitoring, 195–197
  self-monitoring, 196–197
  without feedback (BCT 2.1), 196
motivation, 81
  amotivation, 92
  as continuum, 91, 93
  autonomy and, 86–87
  case example, 247–248
  categories, 103
  COM-B model, 126
  competence, 90
  decision making, 87
  external regulation
    mandatory learning, 96–97
    professional development, 96–97
    reactance, 97
    rewards, 94–95
  extrinsic, 83–85
  feedback, 107
  fostering, 104
  goals, 105–106
  highly regulated environments, 87–89
  identified regulation, 101–102
  intrinsic, 83–84, 102
  introjected regulation, 97–99
    timesheets example, 98
    training and, 100
  involving others in solution, 90
  jargon and, 106
  learners
    choice, 104
    myths about, 82
    persistence of, 83
    relatedness and, 90
    strengths-based language, 106

N
natural consequences (BCTs), 165
negative emotion reduction (BCT 11.2), 222
networking for college graduates, 156
nudges, 229

O
Oettingin, Gabriele, *Rethinking Positive Thinking*, 145
opportunity case example, 246–248
outcomes versus behaviors, 199
overjustification effect, 94
ownership, behavior change and, 148–149

P
paper usage virtual reality experiment, 65–67
participant protection, 228
performance
  adjustment, 43
  behavior, instruction, 204
  defining, 137
  interview steps, 186
  support, 44
  persistence of motivation, 83
  personal experiences, 9
  value, 69–72
persuasion as intervention, 162
physical environment restructuring, 200
piloting, 254
Positive Deviance Collaboration, 118
practicability (APEASE criteria), 118
practice, 43
  automaticity, 192
  automaticity development, 190–191
  case example, 250
cycles of expertise, 43
ease, creating, 189, 192
leveling up, 43
memory and, 189, 192
real-world missions, 43
practice opportunities, 138
practice/rehearsal (BCT 8.1), 209
prelearning, 41–42
  case example, 249
presentation, training, 76
problem definition, 253
problem solving, BCTs, 187
professional development, external regulation, 96–97
prompts/cues (BCT 7.1), 198, 207
pros and cons (BCT 9.2), 177
prototyping, 254
  BecomeAnEx.org, 274
  VALOR Nigeria, 283
punishments, 199
relatedness, motivation and, 90
repetition and substitution (BCTs), 165
research and analysis
  audience, 253
  case example, 242
resources, 44
  case example, 250
restriction as intervention, 163
restructuring physical environment (BCT 12.1), 200, 206
restructuring social environment (BCT 12.2), 206
Rethinking Positive Thinking (Oettingen), 145
retirement planning example
  audience, 168
  behavior change, 170–172
  COM-B analysis, 169–170
review behavior goals (BCT 1.5), 195
reward and threat (BCTs), 166
rewards
  external regulation, 94
  wellness gift cards, 95
  removing (BCT 14.3), 210
  versus incentives, 199
role models, self as (BCT 13.1), 220
routines versus habits, 193
S
Salesforce pay equity example, 23
salience of consequences, 172
scaffolding, 44
  anxiety/fear/discomfort and, 143
scheduled consequences (BCTs), 166
self-as role model (BCT 13.1), 220
self-belief (BCTs), 166, 178
Self-Determination Theory, 106
self-monitoring of behavior (BCT 2.3), 196
reactance, motivation and, 97
real-world missions, 43
recognition, interview steps, 186
refreshing activities, 45
  case example, 250
regret, anticipated regret (BCT 5.2), 175
regulation (BCTs), 166, 222
reinforcing processes, 17
salience of consequences, 172
scaffolding, 44
  anxiety/fear/discomfort and, 143
scheduled consequences (BCTs), 166
self-as role model (BCT 13.1), 220
self-belief (BCTs), 166, 178
Self-Determination Theory, 106
self-monitoring of behavior (BCT 2.3), 196
self-monitoring of outcomes (BCT 2.4), 197
Senge, Peter, The Fifth Discipline, 17
shaping knowledge (BCTs), 165
side-effects (APEASE criteria), 119
significance, value and, 54–56
Simcoach Games, 275–279
Six Sigma, visual workplace, 135
smoker/nonsmoker identity, 219
smoking cessation, tangible value and, 67, 68
social environment, restructuring (BCT 12.2),
206, 210
social proof, behavior change and, 147–148
social support, 165, 208–210	descript (BCT 3.2), 198, 208, 223
unspecified (BCT 3.1), 207
solution strategy, 254
spill-over effects (APEASE criteria), 119
Simcoach Games, 275–279
Three Sigma, visual workplace, 135
strength-based language, 106
substituting behaviors, 198
support	audience research and, 202
COM-B analysis, 203
environment and, 204, 206
social, 208–210
practical, 208
unspecified, 207
support systems, 201
system level consequences of behavior change, 22
system mapping, 17
systems, 13
behavior and, 14
bias in, 14
evaluation data, 17
irrationality in, 14
Lazy System 2, 14–15
tuning, 24–26
visual workplace, 135
systems thinking, 16

T
tangible value, 63–65	presentation, 76
smoking cessation, 67–68
virtual chainsaw experiment, 65–67
testimonials, 77
testing
classroom materials, 259
design and, 229
Simcoach Games, 276
Thinking, Fast and Slow (Kahneman), 7
Thinking in Systems: A Primer (Meadows), 16
tools, leaving for learners, 32
training
as intervention, 162
autonomy and, 149
case example, 243
confidence level and, 145
consequences, and, 140
emotional reaction and, 155
environment and, 142
feedback effects, 135
goals, illustrating, 137
goal-setting learning activities, 137
identified regulation, 102
identity and, 154
incentives and, 152
learned helplessness and, 150–151
managers, support for, 136
mistrust and, 146–147
motivation, introjected regulation, 100
ownership and, 149
performance, defining, 137
performance goals and, 137
practice opportunities, 138
rubrics, 137
social proof and, 148
testimonials, 77
unlearning behaviors, 138, 139
value and, 73–75
values and, 154
visual design and, 75
training issues
diagnosing, 132
feedback problems, 133
feedback, 135
troubleshooting, help, 44
tuning systems, 24–26

U
unintended consequences, 226
unlearning behaviors, 137
handwashing example, 138
practice opportunities, 138
training and, 138–139
user testing, 254

V
VALOR Nigeria, 279–287
value
barriers, perceived, 77
calculating, 54
call to action, 78
communicating, 48
ease of use, 77
effort and, 49–51
email example, 73–75
feedback and, 78
immediacy and, 56–57
delayed rewards, 57–62
immediate use, 63
likelihood, 69
personal experience and, 69–72
medical personnel audience, 54
significance and, 54–56
tangible, 63–65
presentation and, 76
smoking cessation, 67–68
virtual chainsaw experiment, 65–67
testimonials, 77
training and, 73–75
visual design in training, 75
WIIFM (What’s In It For Me?), 52–53
valued self-identify (BCT 13.1), 221
values, 211
audience, 212
behavior change and, 152–154
learning experiences, 108
COM-B analysis, 213
verbal persuasion about capability (BCT 15.1), 178
VHIL (Virtual Human Interaction Laboratory), 172
virtual reality experiment, 65–67
virtual chainsaw experiment, 65–67
visceral experience, 9, 43
cycles of expertise, 43
leveling up, 43
real-world missions, 43
visual design, 75
tangible, 76
visual workplace, 135
W–Z

wellness programs, motivation and reward, 95
WhatsApp, VALOR Nigeria, 284
whole process approach, 31
WIIFM (What's In It For Me?), value and, 52–53