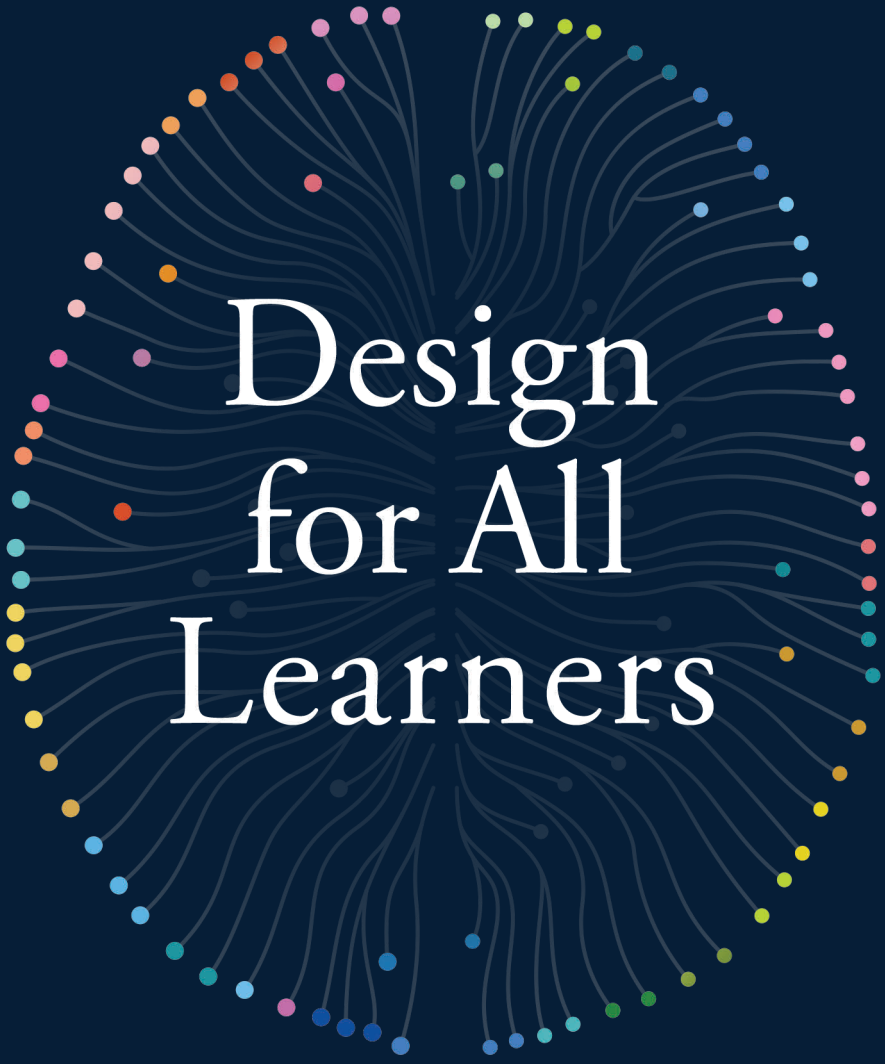
Sarah Mercier, Editor



Design for All Learners

Create Accessible and Inclusive Learning Experiences

More Praise for *Design for All Learners*

"*Design for All Learners* is a must-read for professionals who are serious about creating inclusive spaces and learning experiences. This book provides practical, actionable insights that will benefit anyone committed to making education accessible for everyone. If you're ready to break down barriers and design with accessibility in mind, this book will show you how."
—**Keely Cat-Wells,** CEO, Making Space; Disability Rights Advocate

"Accessibility isn't just about compliance. It's about the potential and dignity of a world created for all learners, and how that world is better for everyone. Full of heartfelt stories and practical insights, this book should be on every learning designer's bookshelf."
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"Accessibility is a laudable goal stymied by a complicated set of issues and a dearth of clear advice. This engaging and well-structured book, authored by a stellar cast and assembled into a coherent presentation by a committed editor, is the handbook we all need to make sense of, and progress, on this valuable area of endeavor."
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"I love that this book not only gave me practical strategies I can use right away to create more inclusive learning experiences, but it also helped me truly understand why accessibility is so important. It's got real examples, tools, and templates that make championing accessibility and improving learning experiences more achievable."
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"If you're serious about reaching every learner, *Design for All Learners* is a must-read. It's a game-changer for anyone designing learning experiences and it provides actionable steps to make learning effective for all."
—**Nick Floro,** Learning Architect and Co-Founder, Sealworks Interactive Studios

"*Design for All Learners* is an essential toolkit for anyone who wants to go beyond mere accessibility compliance to create truly inclusive learning experiences. It is packed with practical tools and expert insights that bridge the gap between theory and transformative results."
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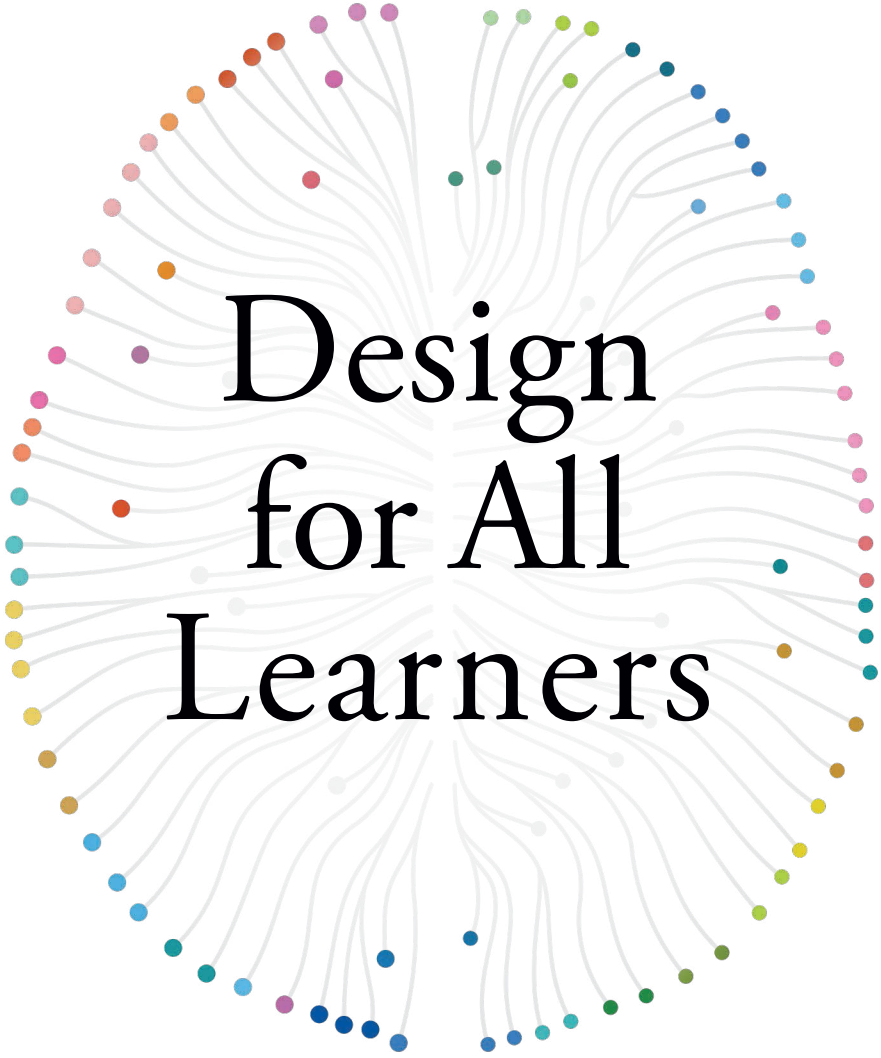
"Rarely am I as captivated by a nonfiction book as I was with *Design for All Learners*. This is a breakthrough book for learning designers who want to create equitable learning experiences for everyone, and its rich stories from unique voices will open your mind and challenge your assumptions. We've needed a book like this for a very long time."
—**Connie Malamed,** Publisher, The eLearning Coach Website and Podcast

"A must-read for anyone involved in creating learning experiences, this book champions Design for All principles and offers practical guidance on making learning accessible and inclusive for everyone. Readers will learn how to create inclusive experiences in any setting, from adapting group work for neurodivergent learners to ensuring in-person presentations are accessible and designing virtual events with accessibility in mind."
—**Hadiya Nuriddin,** Chief Learning Strategist, Duets Learning

"Sarah Mercier has gathered thoughtful stories, examples, and processes from a wide range of experts to offer thoughtful approaches to developing inclusive learning experiences. By addressing common myths about accessibility, this book aims to shift our own personal perspectives to be more inclusive and make better design choices so everyone can learn."
—**Tracy Parish,** Learning Consultant, Parish Creative Solutions

"Inclusive design may seem complicated and scary to many designers. *Design for All Learners* collects a wide breadth of knowledge, resources, and experiences, without being overwhelming. Each chapter can be read in one sitting and ends with something you can do right away. The diversity of authors is a real plus, which allows many kinds of challenges to be highlighted and backed up with personal stories and case studies."
—**Dave Gray,** The School of the Possible

Sarah Mercier, Editor



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Christian, Ian, and Nathaniel—I'm so proud of you.
You give me hope for the future.

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Tools

Design for All Accessibility and Inclusion Statement

The authors in this book are professionals who were asked to share their expertise in one or more topic areas for which they have deep experience.

Some authors have self-identified as Blind, visually impaired, Deaf, Hard of Hearing, mobility-challenged, and neurodivergent. Others have self-identified as being part of one or more of the following communities: BIPOC (Black, Indigenous, and people of color) and LGBTQIA+ (lesbian, gay, bisexual, transgender, queer, intersex, asexual, plus other identities). **Each author who self-identified used the terminology and capitalization that they preferred.**

The authors in this book strive to use the terminology known to be of acceptable use at the time of writing. Visual examples include alternative text for digital versions of the book and image descriptions where appropriate.

A third-party sensitivity reviewer, Isabelle Felix at Writing Diversely, provided feedback that was incorporated into this book prior to publication.

The EPUB adheres to WCAG 2.0 AA guidelines, and the PDF has been validated using Adobe Acrobat Accessibility Checker and PAC 3 (PDF Accessibility Checker 3).

We are committed to accessibility and inclusion and welcome your feedback. Contact Sarah Mercier at contact@buildcapable.com or use the contact form at DesignForAllBook.com with any questions or comments you have.

Preface

Sarah Mercier
CEO, Build Capable

Several years ago, I listened to an episode of the *99% Invisible* podcast called "Invisible Women."[1] It explored lessons from the book *Invisible Women: Data Bias in a World Designed for Men* by Caroline Criado Perez.[2] The episode shared one particularly interesting example about the design of crash test dummies, which are human-shaped dummies used to test the human response during a vehicle crash. These dummies are based on the male body, which just so happens to exclude half the world's population. And, when female versions of test dummies are included, they are usually slight adaptations of the male version and placed in the passenger's seat.

The result is that women are 73 percent more likely to be injured or die in a car crash.[3]

I share this story to say this: If you want to be a good designer of anything—products, built environments, or learning experiences—you must account for the broad spectrum of people who make up your target audience, not just a watered-down perception of "normal" that doesn't actually exist. At its core, that's what the concept of "Design for All" is about—getting better at designing for people. To do that, you must better understand people, especially people who aren't like you.

From a very young age, my mom taught me to value diversity. Let me share another story with you, one that she shared with me when I was little.

In 1969, my mom and her friend were traveling cross-country (from Tennessee to California) when they stopped in Oklahoma to buy some souvenirs. They were wearing their hair in braids, bell bottom jeans, and crop tops. The shop owner refused to serve them because they were hippies. My mom said that experience was one of the worst feelings she'd ever

had, but she went on to tell me that as a young child, she had visited Selma, Alabama, and was confused by the "No Blacks" signs she saw everywhere. She thought it was horrible that people would be treated that way. She also told me about the times when her best friend and his husband got death threats because they were gay. After describing these experiences, she said, "Even though I had that one experience of someone discriminating against me, it's nothing compared to what a lot of people experience every day. You always need to remember that."

As a child, I couldn't understand why people would do these things. It didn't make any sense to me. It still doesn't.

It's also worth mentioning that my mother was diagnosed with multiple sclerosis (MS) when I was 12 years old. Throughout my adult life, I have had countless experiences of helping her navigate access to airports, restaurants, event venues, shops, beaches, parks, and many other public places. The effort required to do something as simple as having dinner or going to a show has ranged from being easy to completely impossible, depending on things like access to accessibility information, the availability of ramps, the distance from the parking lot, the space to maneuver her rollator, or access to a wheelchair.

The worst thing is when someone tells you that their venue is accessible, but when you arrive, you realize it's not. It's like showing up to a high-rise office building for an appointment on the 30th floor, but there are no elevators. Would you be upset if you were expected to climb 30 flights of stairs whether you have a disability or not? This analogy is small in comparison to the absurdity of many of the barriers unnecessarily put in front of those with disabilities.

But, this book is not about trying to tackle all the world's injustices. It's about what *you* can do. You've chosen this book to find ways to help remove barriers and create inclusive learning experiences, and for that, I am grateful.

In research for this book, I've had the opportunity to hear stories that brought me to tears. But, I wasn't crying because I felt sorry for the people who shared their experiences with me. They have been innovating around poor design of the world around them, often throughout their lives. I was

emotional because I felt embarrassed by my own assumptions and actions. Their stories gave me hope because they helped me change, and now I can share what I've learned with you.

However, it's important to note that I knew writing this book on my own would undermine the premise. I knew that I could write about the topics from my own research, experience, and professional practice, but that's not enough. I didn't want to speak for anyone. Instead, I wanted to move over and make space for others to speak for themselves. Design for All came to life when its principles were applied in the approach to this book. You'll learn from experts with a wide range of lived experiences, both professional and personal.

I told everyone that I'd never write a book until it was something that I cared about enough to spend the time it would take to do it right. This is that book.

Introduction

A Journey to Design for All

Sarah Mercier
CEO, Build Capable

My journey to inclusive design is full of good intentions and plenty of mistakes. Allow me to take you back in time to 2004. Not only was this the year that Mark Zuckerberg launched Facebook from his dorm room and Google introduced Gmail, but it was also the year I began my first "official" role in the learning and development field. As a senior technical trainer for a major credit card processing company, I was primarily responsible for onboarding new hires and providing ongoing training for call center representatives.

I spent most of my time in the classroom demonstrating tasks in our systems. In addition to classroom training, I worked across a variety of departments to identify weekly training topics and created e-learning content using an authoring tool in the learning platform. This training material was delivered directly to learners' email inboxes. Thanks to a co-worker, I even discovered a shiny new tool called RoboDemo (which would become Adobe Captivate) that allowed me to record system simulations so learners could practice tasks without any risk to real customer accounts.

Although I believe that I was a great trainer, there was something I didn't do. I didn't make the e-learning accessible. As opposed to being highly interactive and participant centered in the classroom, my e-learning programs were content centric. I have no idea whether there were people who completely missed out on their weekly training because I didn't know anything about digital accessibility or inclusion. I never even considered it.

Just a few years later, in early 2008, I traveled to Milton Keynes in England as a training consultant to support the launch of a new call center. For the first time, I began to realize just how different the English language is based on where you live. Something as simple as telling classroom participants where the bathroom is (WC, or water closet) or where they can throw away their trash (or rubbish—in the bin) changed the way I thought about teaching. There were participants in my classroom from other countries with different ways of thinking. Even the concept of credit (which was ubiquitous in the United States) was foreign to most folks there at the time. The individuals in my classes frequently laughed at my American analogies and examples during training.

I quickly began to work with other local trainers to improve my teaching approach, and it was certainly a learning experience. Within a few short months, I customized (localized) my classroom training. It's fair to say that, although I was just becoming aware of ways to be more inclusive, I still was not thinking enough about accessibility needs or barriers at this point in my journey.

In the latter part of 2008, I started a new job as a call center training supervisor for a national company in the automotive industry. Something about this job was quite different than what I had experienced in my journey to date—I was training blind and partially sighted call center representatives. I started to learn how to make accommodations so the training was more accessible. For example, at the request of one representative with low vision, I increased the font size on my job aids and other training documentation to 90-point, resulting in upwards of 100 pages of printed materials. I also created e-learning content that could be read aloud by JAWS, a popular screen reader application. Yet, there were still many limitations with our authoring tools, learning management system, and, unfortunately, my lack of knowledge. I often needed to engage a supervisor or co-worker to help their colleagues read through the content, complete activities, and take online tests. This process was extremely time consuming and, frankly, not a great experience for anyone.

At this point in my journey, I began to realize just how much of an impact inaccessible training can have on individuals with disabilities. The processes they had to go through to participate in even the most basic training was unnecessarily daunting, but I had no idea how to solve the problem. It was frustrating, but I did my best to learn and change what I could.

Fast forward to 2012. At this point, I specialized almost exclusively in designing and developing online content, including content delivered on mobile devices. I launched a company and worked with organizations across a variety of industries. I was creating fun games, mobile applications, e-learning—the whole package. I built solid knowledge of user interface (UI) and user experience (UX) principles to the point where I was also consulting large-scale companies and their teams on making better design decisions.

To be completely transparent, even though I had some experience training individuals with disabilities, I still didn't have great digital accessibility skills outside alt text for images and captions for videos. It's not accurate to say that I didn't care, but rather anything beyond that wasn't part of my design mindset yet. I didn't have enough context for the various ways I could avoid excluding people and reduce barriers to their ability to learn. To make matters worse, it was not something that companies prioritized. Some even refused to invest resources to create accessible content because "no one with a disability works here."

In 2016, more than 12 years into my formal training career, I attended Brian Dusablon's accessibility keynote, "Design for All: Accessible Learning Experiences," at a training conference. He shared stories that I had never considered. One was his experience trying to navigate a computer using a keyboard because he had a broken wrist and couldn't use his mouse. Another was a time when he designed an online course with low color contrast and received feedback about it from a colleague. He provided tools and processes to address many accessibility pitfalls that I had never really considered.

Finally, I was beginning to identify ways to improve my design process right from the start.

It was also during his presentation that I realized accessibility went beyond permanent disabilities. What about a temporary or undisclosed disability? How about those of us who wear glasses or hearing aids? Or are colorblind? Or speak a different native language? Brian said, "We are all on a spectrum." That stuck with me.

Consider this example. Figure I-1 shows three children at a baseball game standing behind a wooden fence. This image originated at The Inclusion Solution blog from The Winters Group, a Black women–owned and led diversity, equity, inclusion, and justice consulting firm. It's now widely adapted, shared, and discussed.

Figure I-1. Equality. *Source: Image adapted from The Interaction Institute for Social Change interactioninstitute.org, original concept by Craig Froehle.*

Notice that the children have all been given the same size box to see the game over the fence. This is an example of equality—each child has the same accommodation. Unfortunately, despite having a box, the

middle child can barely see over the fence, and the child in the wheelchair is unable to use the box or see the game.

As an alternative, what if each child is given exactly the accommodation needed to comfortably see over the fence? Now, there is a ramp for the child using a wheelchair, the middle child gets two boxes, and the tallest child doesn't need a box—each one gets just what they need to see the game over the fence (Figure I-2). This is an example of equity. Each child receives the accommodation needed to experience the game.

Figure I-2. Equity. *Source: Image adapted from The Interaction Institute for Social Change, original concept by Craig Froehle.*

Or, what if it was a chain link fence that the kids could see through? Now, none of them require accommodation to see the game because the barrier is removed (Figure I-3).

Figure I-3. The barrier is removed. *Source: Image adapted from The Interaction Institute for Social Change, original concept by Craig Froehle.*

Mind. Blown. These images completely changed my perspective. Could I identify the barriers? Could I start designing better fences?

In 2018, I joined a team that was passionate about accessibility and inclusion. We wrote about it, spoke about it, shared resources, and even created a free text-based SMS course to help others learn about it. We formally implemented processes to ensure we were designing with an inclusive mindset from the start, and that we caught anything in quality control that may have been missed. No matter how many projects I worked on, I constantly discovered ways we could improve. Ways to do better.

This also meant taking a close look at our organization. At my first strategic retreat with the company, we began discussing a rebrand to change our name, Learning Ninjas. Although it certainly wasn't the only reason for the change, we had learned that using "ninjas" to describe ourselves may be considered offensive, and that was not how we wanted to show up in the

world. As an organization that prioritized being inclusive, we were excited to ditch the old name and begin the process of rebranding as Build Capable.

By 2019, I was working on a large mobile learning application with a few other organizations. This multiyear project consisted of continuous design and development iterations as we revised and added content in the app. In that year's phase of the project, I pushed for a full accessibility and inclusion audit. We spent hours adding missing alt text to images, testing screen reader functionality, verifying that videos contained closed captions, and ensuring images represented a more diverse population. How was this missed in the first place? It wasn't intentional. It was a lack of awareness. Once I brought it up with the project team, everyone moved forward with a thoughtful, intentional process for future design cycles.

Then, it was late 2020. Or, was it 2021? It all runs together. I was attending a virtual online event during a global pandemic. The speakers had recorded videos of their presentations, and I was excited to do something other than bake bread or scroll social media. I logged in to the event in my home office alongside my son, who was busy working. Where are my wireless headphones? Dead. Probably from the kids watching TikTok videos. I opened the first presentation intending to watch with my computer muted so I wouldn't disturb my son. I searched for the "cc" button, but there were no closed captions. When I provided feedback to the event host, they responded, "We didn't turn that feature on because we didn't think anyone would need it." I actually felt a little guilty. Did I need it? I suppose the answer is yes because I never came back to those presentations.

2022 was the year that I put my experience to the test. I began working with a client that provides braille training and other learning opportunities to individuals with vision loss or blindness. Similar to my experience back in 2008, they were struggling with the accessibility of their e-learning content due to the technical challenges and limitations of their authoring tool, which also happens to be the most popular tool in our industry. Even after scaling back their courses to an extremely simplified format, screen reader behavior and device functionality (from desktop to mobile devices) was inconsistent during testing.

I reached out to the authoring tool vendor and found someone on their development team who was more than willing to work on this with us, which was very encouraging! While they were logging tickets to establish bug fixes, I worked on a short-term solution. I wrote some custom code and shared the fix with the authoring tool vendor as well as the client's learning platform vendor. With this, we were able to address most of the issues. In addition to end-user testing, my team validated the fix by using screen readers, including Apple's accessibility feature, VoiceOver. Even with that, a few bugs remained that required workarounds. The vendors assured us, "It's on our road map.

* * *

Now, I am sharing these parts of my journey with you. How exciting! And you picked up this book to find answers. Despite the tools you have to work with, your corporate culture, and the fact that you're probably overwhelmed with demands vying for your time, you want to find ways to Design for All. That's badass.

So, how do you begin your own journey to accessible, inclusive design? Let's start with a level set on some important terminology.

Accessibility, Universal Design, UDL, Inclusion, DEI, and More!

I don't know about you, but I find that terms like *accessibility*, *universal design*, *inclusion*, and *DEI* are often tossed around and used interchangeably. However, each one carries a unique, important perspective.

Accessibility

According to the US Department of Education, "Accessibility means a person with a disability is afforded the opportunity to acquire the same information, engage in the same interactions, and enjoy the same services as a person without a disability in an equally effective and equally integrated manner, with substantially equivalent ease of use."[4] Many of the examples in this book are accessibility focused, like my example of making accommodations for call center representatives who were blind or had low vision.

Let's apply an accessibility perspective to the fence illustration I mentioned earlier. What about a child who is blind? How will they experience the baseball game? The accommodation they would need has nothing to do with the fence.

Accessibility needs are an increasingly popular topic for designers for many reasons—from legal considerations to personal experiences. It can be challenging if you're not familiar with the wide range of individual needs of people with disabilities. Add in the frequent objections like "There's no one in my company who is [*enter disability here*]," and you pile on the lack of buy-in from necessary decision makers in your organization.

Universal Design

Universal design is the practice of designing something in a way that maximizes usability for as many people as possible. There are seven principles of universal design:

1. **Equitable use.** The design is useful and marketable to people with diverse abilities.
2. **Flexibility in use.** The design accommodates preferences and abilities.
3. **Simple and intuitive use.** The design is easy to understand how to use.
4. **Perceptible information.** The design can be perceived by a person's senses, regardless of environment or sensory abilities.
5. **Tolerance for error.** The design minimizes hazards and adverse consequences of accidental or unintended actions.
6. **Low physical effort.** The operation is efficient and comfortable.
7. **Appropriate size and space for approach and use.** The design allows the space for mobility and is appropriate for reach and use, regardless of the person's body size, posture, or mobility.

Universal design can be applied to built environments, the digital world, and yes—even learning experiences.

Universal Design for Learning

According to CAST (formerly known as the Center for Applied Special Technology), *universal design for learning* (*UDL*) "is a framework to guide the design of learning environments that are accessible and challenging for all. UDL aims to change the design of the environment, reducing barriers so that all learners can engage in rigorous, meaningful learning."[5] Although this framework is intended to serve as a systematic approach to applying universal design in a learning context, it may not address the specific needs of learners with disabilities in the way that an accessibility focus does. It may not fully support individual circumstances, even if the goal is to consider these individuals more broadly. That said, UDL can be a useful framework to begin ideating ways to create more accessible and inclusive learning experiences.

Diversity, Equity, and Inclusion

Diversity, equity, and inclusion (*DEI*) is "a conceptual framework that promotes the fair treatment and full participation of all people, especially in the workplace, including populations who have historically been underrepresented or subject to discrimination because of their background, identity, [or] disability."[6] *Inclusion*—both as a component of DEI and its own practice within the workplace—is "the act or practice of including and accommodating people who have historically been excluded (because of their race, gender, sexuality, or ability)."[7]

While DEI is a commonly used acronym, many have criticized and revised it, suggesting alternatives like DEIB (diversity, equity, inclusion, and belonging), IDEA (inclusion, diversity, equity, and access), and even JEDI (justice, equity, diversity, and inclusion). I believe that the meaning behind each of these these letters is incredibly important, and the problem is less about choosing an acronym and more about inadequate implementation.

Some organizations have established DEI departments and leadership to work toward this goal. Although this is a critical step, it doesn't always extend to the learning and development (L&D) function in ways that have a systematic influence. There are still deep skills gaps, mindset

changes, and political pressures that must be addressed to make real progress. Workplace policies, processes, environments, and cultures, among other things, often fall short when it comes to diversity, equity, and inclusion. Many companies fail to create a safe space where all people feel confident they're in a place where they belong. Also, consider the popular phrase, "Nothing about us without us." Initiatives that exclude the people they are meant to represent lack credibility and likely won't succeed.

Design for All

This book intends to help you Design for All—exploring design where these perspectives intersect and overlap. When learning about accessibility, you'll find ways to ensure that individuals with disabilities (whether permanent, temporary, or even situational) can fully participate in the training you offer. When you focus on UDL, you'll find ways to offer training with options that accommodate the most people with the least barriers. By gaining knowledge about inclusion, you'll also consider things like education, language, computer literacy, economic conditions, internet connectivity, microaggressions, lack of representation, and more. ("Microaggressions are the everyday slights, insults, putdowns, invalidations, and offensive behaviors that people experience in daily interactions with generally well-intentioned individuals who may be unaware that they have engaged in demeaning ways."[8]) Focusing on DEI can help with operationalizing inclusion efforts across an organization. Design for All explores what happens when you foster a mindset that takes all these perspectives into account. It's not a model or a framework, and it's not new.

The Design for All concept has been around since at least the late 1990s, bringing together user-centered design, accessibility, and universal design.[9] You'll find applications of Design for All everywhere—in architecture, products, and services. I even found a Design for All initiative to foster inclusion across Europe (EIDD—Design for All Europe). In this book, we will explore what Design for All can do for the L&D field.

I began this introduction with my journey to inclusive design, and I chose the word *inclusive* on purpose. I believe that possessing an inclusive

mindset is the key to Design for All. It will drive you to remember that *learners* are *people* who have unique experiences, perspectives, backgrounds, and abilities. This book will help you make better design decisions so everyone can learn.

Is This Book for You?

Before I can answer that, I have to ask: Do you truly care about helping people learn? Take that a step further: Do you care about helping *everyone* learn? Is your goal to be a compliant designer or a great designer? Do you want to lead a team that creates "check the box" courses or training that is effective?

What is your current role? Are you a "team of one" responsible for everything from instructor-led training to e-learning, perhaps even managing your company's learning platform? Are you a training manager responsible for implementing processes and practices in your organization while leading a team? Maybe your job responsibilities include a mashup of classroom training, in a face-to-face or virtual environment, and sharing subject matter expertise. Regardless, you are likely juggling competing priorities and trying to figure out how something so important can be part of your work in a meaningful way.

I have great news. This book was designed especially for you.

What you take from this book won't change much based on your job title, whether you are a team of one, or if you work in a large organization with many resources—but what you do with the information might. And, if your goal is to become a better teacher, designer, and leader, I can promise that you will leave here with a packed toolkit.

This is where it gets good. Anyone who is creating training content; facilitating in-person or virtual training, meetings, or events; building or supporting systems and software (I'm talking to you, IT departments and system vendors); or feeding content into and out of these areas (like communications, marketing, sales, and IT staff) will benefit from the wide range of information shared in this book.

As the most hopeful version of myself that I can be, I will take this a big step further. Anyone who picks up this book, no matter what they

do for work, will learn something they can use to help make the world a better place for all of us.

How Is This Book Organized?

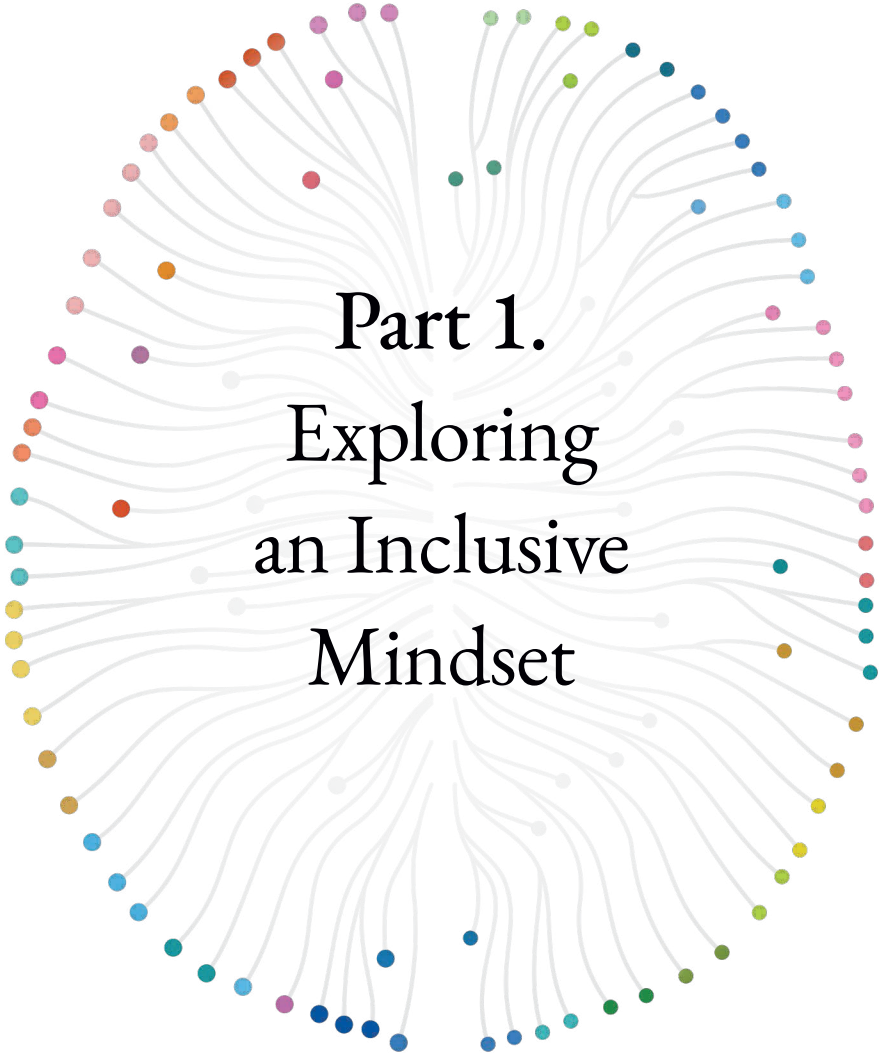
Each part of this book has been thoughtfully structured around what you need to know about Design for All and what you can do with that information. Some strategies are at the organizational implementation level, some are at the design and development level, and others are focused on how to shift your individual mindset. Many are led with stories that inspired practitioners and experts to change the way they think about designing for people.

- **Part 1, Exploring an Inclusive Mindset,** contains practical ways to develop your own personal goals for inclusive design. It also addresses common myths about accessibility and ways to shift your perspective.
- **Part 2, Designing Inclusive Digital Content,** is perfect for designing and developing any type of digital content, such as PowerPoint presentations, PDFs, e-learning content, videos, and other digital materials and experiences. You'll find that this part has the most information, which is great because nearly all of us create some form of digital content! The chapters include real stories, examples, processes, tools, and tips to support you.
- **Part 3, Creating an Inclusive Physical Classroom,** covers important considerations for classroom facilitators and presenters. This is where you'll find excellent examples for inclusive design practice in today's classroom or in-person presentation settings.
- **Part 4, Creating an Inclusive Virtual Classroom,** is an important topic, especially in recent years due to the overwhelming increased use of digital meeting platforms. Expect to learn about how you can shift to a more inclusive practice with lessons learned from virtual event facilitators and producers.
- **Part 5, A Primer on Accessibility Standards,** is all about translating the standards and legal aspects of accessibility. Expect

to learn more about a wide range of accessibility standards, such as the Web Content Accessibility Guidelines (WCAG), the Americans with Disability Act (ADA), European Accessibility Act, and many others.

- **Part 6, Adopting an Inclusive Mindset in Your Organization,** focuses on areas such as quality assurance, quality control, whether you should hire or outsource accessibility resources, governance and audits, and how to have important conversations with decision makers.
- **Part 7, Taking Action,** is a lesson in what might happen when you start to design for all, and how to strive for progress over perfection when things get tough.
- **Take Action Toolbox** is where you'll find a quick reference to the gold mine of resources, guides, templates, and examples shared throughout the book!

I am so glad that you've decided to embark on your own journey to Design for All. Are you ready to begin?



Part 1. Exploring an Inclusive Mindset

1.
Accessibility Benefits Everyone

Leah Holroyd (she/her)
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> "Accessible design is just good design." —Becky Brynolf, Royal National Institute for the Blind (UK)

Prioritizing accessibility is a brilliant thing for so many reasons. When I talk to organizations about accessibility, I speak about the moral arguments for inclusion, the legal requirements, and the business case. On the last, the World Health Organization has estimated that one in six people have a disability.[10] Additionally, research has shown that 69 percent of people will simply leave a website if they encounter accessibility issues.[11] Therefore, you're missing out on a sizable portion of prospective customers or participants if you're not thinking about accessibility. However, to my mind, the moral argument alone—that everyone has a right to be included—is sufficient.

The great thing about accessibility is that accessible design practices benefit everyone, whether they have a disability or not. All of us might be affected by permanent, temporary, or situational barriers at some point in our lives. Consider an example in the learning design context: Providing captions and a transcript for any video or audio content means that it can be accessed by a deaf person (a permanent barrier), a person with an ear infection (a temporary barrier), someone who's working in a noisy open office or at a kitchen table with their kids (a situational barrier), or someone who is learning in a second language.

I once attended a conference where a woman recounted her own experience of falling ill while studying for an online qualification. She explained that her medication sometimes affected her hearing, so she would turn on the video captions on the days when this was an issue for her. Her accessibility requirements varied from one day to the next, depending on the severity of the medication's side effects.

We can probably all think of a time when we've experienced some sort of barrier that was (or could have been) alleviated by more inclusive design choices. A few years ago, I was hit by a taxi while crossing the road outside a hotel where I was staying. Luckily, I came away with just one broken toe and a lot of bruises, but I spent a few days using crutches to help me get around. I had to go into London to attend meetings during this time, and I remember finding it very challenging to navigate the Tube (the London Underground system). I had brought a small suitcase with me, not realizing that it would be impossible to carry a suitcase while holding a crutch in each hand. Some Tube stations have step-free access, but many don't, and I was close to tears as I tried to get up and down the stairs with my luggage. Obviously, this experience doesn't mean I know what it's like to have a disability that affects my movement. But this temporary injury did give me insight into how inaccessible some Tube stations are. As in the video captioning example, providing elevators and ramps at all stations would benefit many people, including wheelchair users, people with lots of luggage, people with children in pushchairs (or strollers)—the list goes on!

When I talk to people about digital accessibility, I like to emphasize that there is a lot of overlap between the accessibility measures that can help different groups of users. For example, while in a video call with a new client, I described some accessibility issues I'd encountered on their website and in their social media posts. I pointed out several instances in which they had used a heavily stylized font in all caps and explained that it was very hard to read for someone like me with central vision loss. The woman I was speaking to could see my point straightaway and told me that she had dyslexia and also found text in all caps harder to parse. This was the perfect illustration of how a particular approach—using a plain

font and avoiding all caps—could benefit both people with visual access needs and people with cognitive access needs.

What You Can Do Right Away

Think about any permanent, temporary, or situational barriers to accessibility you've faced in your day-to-day life and how your experiences in the physical or virtual world might have been impaired by them. As you embark on your journey to more accessible and inclusive learning design in this book and beyond, maintain this mindset: Accessibility benefits everyone.

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As a chief operations officer, **Todd Cummings** has successfully worked in ELB Learning's transformation from a startup to a global leader in the L&D industry. His history of working globally and with major organizations contributed to his ability to help this transition. Todd's leadership has fostered a culture of innovation and collaboration, enabling the integration of diverse teams and optimizing processes across multinational structures. He also contributed with others to create Inspire Accessibility with goal of helping everyone participate in learning experiences.

Betty Dannewitz is a leadership development solutions architect at The Ken Blanchard Companies. With more than 20 years of corporate learning experience, she is an advocate for immersive technology and alternative learning solutions. Betty is recognized industry-wide for her highly creative solutions, including those that use augmented reality, virtual reality, 360-degree video, integrated learning journeys, and digital content creation. She is a sought-after consultant, engaging innovative technology instructor, and regular speaker on the national learning industry conference circuit. Betty is also the founder and CEO of ifyouaskbetty, where she helps learning professionals build new skills, think and design differently, and create immersive and alternative learning experiences.

JD Dillon started his career on the frontline—managing movie theaters and theme parks. After 20 years leading operations and L&D at dynamic organizations like Disney, AMC, and Kaplan, he's become an authority on frontline enablement and a staunch advocate for improving the employee experience. A respected international speaker and author of *The Modern Learning Ecosystem*, JD continues to apply his passion for helping people do their best work every day in his roles as Axonify's chief learning officer and founder of LearnGeek, an insights and advisory practice.

Brian Dusablon, MSW, CPACC, is an accessibility and inclusion advocate who coaches individuals and organizations on improving communication and creating more inclusive experiences. He has a master's in social work and is a Certified Professional in Accessibility Core Competencies. Brian loves traveling, meeting new people, and amplifying diverse voices by listening to and sharing their stories.

Suzanne Ehrlich, EdD, is an associate professor and program director in the Instructional Technology, Training and Development program at the University of North Florida (UNF). She currently serves as a Women in AI Fellow for EdSafeAI. She has presented internationally on implementing the Universal Design for Learning (UDL) framework for improved learner engagement, learning design, and leveraging technology for access. Her research explores topics on the UDL mindset in post-secondary and workplace spaces through a belonging lens. She is a co-founder of UNF's UNITE Design Lab, which is focused on advancing research around UDL to improve training and the workplace through inclusive design.

Diane Elkins is the co-founder of Artisan Learning, a custom learning design firm. She is the co-author of the popular *E-Learning Uncovered* book series and wrote *E-Learning Fundamentals: A Practical Guide* (ATD Press, 2015). She is a founding board member of Inspire Accessibility, a consortium of learning providers looking to champion accessibility in the e-learning industry.

Meryl K. Evans, CPACC, is a TEDx and professional speaker, trainer, and author. Born profoundly deaf, Meryl is a consultant in disability inclusion and accessibility at meryl.net. She's a Certified Professional in Accessibility Core Competencies. The proud native Texan lives in Plano with her family. She spends her free time on crochet projects and trying new things.

Leah Holroyd is the co-director of White Bicycle, a small business based in Essex, UK, which creates bespoke online courses for clients and runs introductory training on digital accessibility. White Bicycle has built online disability inclusion training for the UN World Food Programme, Sony Pictures, and Transport for London. Leah studied modern and medieval languages at the University of Cambridge and went on to work as a learning designer at Epigeum and the University of Canberra. She has a rare form of macular degeneration that affects her central vision. In 2022, she was named one of the UK's Top 10 Female Entrepreneurs to Watch by NatWest and *The Telegraph*. (Photo credit: Sarah Brick.)

Karen Hyder, CTT+, is a trainer of trainers, online-event producer, and speaker coach. She has been using technology to teach about technology since 1991, when she taught software applications courses at Logical Operations in Rochester, New York. In 2017, she was honored with The Learning Guild's Guild Master Award. Currently, Karen supports live, online learning experiences at Hearing First, a not-for-profit that serves professionals earning continuing education units and families supporting children who are deaf or hard of hearing. She is also a certified technical trainer. In addition to her professional work, Karen enjoys rescuing cats and old houses.

Jess Jackson, MEd, MBA, is a seasoned professional with two decades of experience as an intersectional equity speaker, writer, and educational content strategist. She is recognized nationally as an advocate for diversity and inclusion, and has designed award-winning diversity strategies across multiple industries. Jess has authored TorranceLearning's groundbreaking curriculum, Cultivating Racial Equity in the Workplace (CREW), a comprehensive microlearning training program rooted in evidence-informed best practices derived from social psychology research. Jess holds a bachelor's in sociology and Spanish from the University of Michigan

and graduated summa cum laude with both her master of education and master of business administration.

Michelle Jackson, CPTD, is the founder and CEO of Tilak Learning Group, where she helps organizations navigate the complexities of creating engaging in-person, virtual, and accessible online learning experiences that deliver tangible results. She has a master's degree in international and intercultural management and is a Certified Professional in Talent Development. Michelle has spoken about accessibility at multiple professional conferences. She lives in Springboro, Ohio, with her husband, Rodney. When she isn't working, she enjoys traveling, horseback riding, home remodeling projects, and playing with her dog, Arthur.

Judy Katz, MBA, MEd, educates and assists organizations that are working to become more neuroaccessible and neuroinclusive. She has a master of business administration, a master of education, and decades of L&D experience, frequently focusing on issues of communication, management, and DEIB (diversity, equity, inclusion, and belonging). She is also AuDHD+ and brings an authentic and research-backed perspective to her work in neurodivergence.

Kassy LaBorie is a virtual training pioneer, professional speaker, author, and the founder of Kassy LaBorie Consulting and Kassy Speaks. She is a facilitator and author of two bestselling books specializing in human connection in a remote world. She has trained thousands of people around the world on topics such as online presenting, virtual learning, remote teams, and using live online technology in engaging and creative ways. Kassy loves helping organizations, teams, and business professionals experience success while working in a digital world, finding ways to take it from "blah" to aha! Connect with her at KassySpeaks.com and KassyConsulting.com.

Mary Henry Lightfoot, MS, NIC Advanced, CI/CT, is the senior digital learning manager at the Laurent Clerc National Deaf Education Center at Gallaudet University and the owner of Interpreting Connections interpreting service. She is a seasoned interpreter and interpreter educator with a wide range of experiences within the field of sign language interpreting. Mary has a rich background in the intersection of community management, online learning, and interpreting. She applies this background to teaching and training online, online project management, and video interpreting services.

David Lindenberg, CPACC, is a senior technical learning and development specialist at SAS Institute. He has more than 15 years of experience as an instructional designer and e-learning developer in corporate, nonprofit, and freelance settings. He has a master of science in instructional design and technology from the University of Memphis. He is also an IAAP Certified Professional in Accessibility Core Competencies.

Jean Marrapodi, PhD, CPTD, has more than 25 years of experience in learning and development across the corporate and higher education sectors. She champions participatory learning, emphasizing the need to accommodate differences. She lives south of Boston, Massachusetts, with two chatty cats vying for the world record in shedding.

Susi Miller is an industry-leading expert on accessible and inclusive learning content. She is the founder and director of eLaHub, which is committed to helping people make all learning content accessible and inclusive—as the default. Author of *Designing Accessible Learning Content*, Susi has more than 30 years of L&D experience in the public, private, and third sectors. Based in Winchester in the UK, she is a

skilled instructional designer and online course developer and a passionate advocate for digital accessibility.

Daron Moore is a seasoned talent and organization development consultant with a passion for fostering inclusive workplaces. With a bachelor of science in management and organizational leadership and extensive experience in L&D operations, he has used his personal experience to help organizations create environments where employees feel seen, heard, and valued. A proud father of three and coach to hundreds, Daron lives in sunny Tampa, Florida.

Alan Natachu is an L&D professional with more than two decades of experience. He pivoted from an artist career, working with the likes of ABC, Disney, and the Smithsonian, to a training career when he was hired as a creative at Apple, where he worked for two years in a technology trainer role. Alan spent a decade in the higher education sector before making the switch to corporate L&D in 2019. He is a presentation geek who loves emerging L&D technologies and films and videos with closed captions, and he's passionate about making all his content accessible.

Cara North, an award-winning learning experience leader, is the founder of and chief learning consultant at The Learning Camel. She's the author of *Learning Experience Design Essentials* and serves as an adjunct in Boise State University's Organizational Performance Workplace Learning (OPWL) program. She lives in Columbus, Ohio, with her partner, Mathew, and their three cats, Bib Fortuna, Pollock Wallace, and Saffron Leiko.

Haley Shust is a passionate Design for All advocate. At Salesforce, she created an accessibility specialist role in hopes of ensuring equitable learning experiences. She is also the co-owner of The Helpful Folks, where she provides strategic, design, and training support for organizations interested in building accessible practices. Haley lives in Chicago, Illinois, with her husband, Dustin, and two Saint Bernards, Eleanor and Herbert. When not at a desk, she spends her time reading, cooking, or training at the gym.

Kristin Torrence is an immersive learning engineer who focuses on applying the learning sciences, instructional design, and data science practices to design, instrument, and validate extended reality (XR) learning solutions. She is the author of the *TD at Work* issue "5 Models for Data-Driven Learning." Kristin has a master's degree in cognitive studies in education with a concentration in intelligent technologies from the Teacher's College of Columbia University. She co-founded XR in LXD, a meetup and community of practice for learning experience designers interested in designing for XR modalities, and is an active member of the Immersive Learning Research Network, XR Women, and the IEEE International Consortium for Innovation and Collaboration in Learning Engineering.

Yvonne Urra-Bazain is an e-learning developer for Briljent whose work is informed by her experience problem solving for state departments, medical companies, sales groups, and a decade of service as a K–6 public educator. Yvonne strives to be a collaborative partner who develops on-brand training and development material to support professionals. She has embraced opportunities to present at virtual and in-person industry conferences to advocate for universal and user-focused accessible design practices.

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About the Editor

Sarah Mercier, MBA, CPACC, specializes in innovative learning technology and strategic implementation of learning solutions. She is an advocate for learner-centered design and is known for her ability to translate highly technical concepts and research into real-world practice.

As the CEO of Build Capable, she leads an organization that prioritizes inclusive design, equity, and accessibility in all aspects of its products and services. Sarah brings together matrix teams of training, design, and technology experts to work with organizations in a wide range of industries, from small, community nonprofits to global corporations.

Sarah is an international facilitator for the Association for Talent Development and a frequent speaker at industry conferences and business events in the areas of instructional and learning technology strategy. Her work has been published in *ATD's 2020 Trends in Learning Technology*, *The Book of Road-Tested Activities*, *TD* magazine, Learning Solutions, and *CLO* magazine, among other training and workforce publications.

Sarah lives in Olympia, Washington, and enjoys searching for local pods of orcas in Puget Sound and rocks to put in her tumbler.

About ATD

The Association for Talent Development (ATD) is the world's largest association dedicated to those who develop talent in organizations. Serving a global community of members, customers, and international business partners in more than 100 countries, ATD champions the importance of learning and training by setting standards for the talent development profession.

Our customers and members work in public and private organizations in every industry sector. Since ATD was founded in 1943, the talent development field has expanded significantly to meet the needs of global businesses and emerging industries. Through the Talent Development Capability Model, education courses, certifications and credentials, memberships, industry-leading events, research, and publications, we help talent development professionals build their personal, professional, and organizational capabilities to meet new business demands with maximum impact and effectiveness.

One of the cornerstones of ATD's intellectual foundation, ATD Press offers insightful and practical information on talent development, training, and professional growth. ATD Press publications are written by industry thought leaders and offer anyone who works with adult learners the best practices, academic theory, and guidance necessary to move the profession forward.

We invite you to join our community. Learn more at TD.org.

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