



CRYSTAL KADAKIA AND LISA M.D. OWENS

Designing for Modern Learning

Beyond ADDIE and SAM

More Praise for *Designing for Modern Learning*

“Kadokia and Owens masterfully adapt the best of existing training models into their new road map for modern workplace learning. Every training professional should follow their guidance to integrate learning into the business and focus on job performance.”

—**Jim and Wendy Kirkpatrick**, Co-Authors, *Kirkpatrick’s Four Levels of Training Evaluation*

“This book should be on every L&D professional’s shelf. Kadokia and Owens offer a clear vision for the future of learning with a balance between the big picture and how to apply the ideas to programs of all sizes.”

—**Zach Rubin**, Co-Founder and CEO, Professional Book Club Guru

“Kadokia and Owens offer a practical model based on thoughtful analysis of our modern learners’ reality. A must-read for the L&D professional tasked with creating engaging content, driving meaningful change, and measuring the results of behavioral transformation that can only come from true learning.”

—**Grace Amos**, Talent Development, Cisco

“This is a thought-provoking and practical resource that should help learning leaders and instructional designers alike. Full of fresh ideas and a new model that will help us effectively leverage new technology and multiple learning assets to serve today’s modern learners.”

—**Jay Rhodes**, Former Senior Director, Global Learning and Development, BCD Travel

“This book brings a much-needed update to models that haven’t evolved with today’s workplace. OK-LCD addresses the social learning component and scales to include learning technology that hasn’t even been invented.”

—**Rich Hazeltine, CPTD**, RichIntegration.com, former Head of Tech Talent Development, Zappos.com

“This book is the perfect blend of learning theory and practical tools for L&D professionals. It sparks curiosity and creativity for our field—in short, shaping us into modern learners too.”

—**Chris Eversole**, Assistant Vice President, Talent Management, Ohio National Financial Services

“Our world has changed. Learning models that worked in the past have limited relevance in our dynamic and constantly changing world. Kadokia and Owens deliver a powerful learning model that responds to work conditions that are continually evolving.”

—**David Richard Moore, PhD**, Professor, Innovative Learning Design & Technology, Ohio University

“The Owens-Kadokia Learning Cluster Design model takes the best elements of many frameworks and theories and blends them to provide a learner-centric, performance road map for creating authentic learning experiences. If you are looking to take your talent and development strategy to the next level, this book will help guide you from one-and-done learning to a providing a full pathway of learning experiences for your training population.”

—**Cara North**, Senior Learning Experience Designer, Ohio State University

“Sometimes the most simple concepts are the ones we overlook. *Designing for Modern Learning* does an excellent job of viewing learning through the lens of the ‘customer’ or learner in a way that we typically see in marketing but have yet to adopt for L&D in the multifaceted, complex way this book describes. It does a great job combining theory with practical steps and applications for the modern L&D professional to implement right away!”

—**Alex Bowden**, Recruiter Academy Certified Recruiter, PEOPLEfirst, Talent & Retention Consulting

“*Designing for Modern Learning* provides a useful primer for adapting your learning strategy to the digital age. Kadokia and Owens provide a concise, practical reference to guide you through the process of modernizing your learning design and development.”

—**Brandon Carson**, Author, *Learning in the Age of Immediacy*

“Whether you are new to the L&D function or need to understand and examine the business from a more senior perspective, this book provides insightful, relevant, and thought-provoking content. By engaging both with individual learner differences and the need to become business savvy, *Designing for Modern Learning* will certainly support L&D professionals as they grow their careers and continue exploring how the L&D world shifts in this new skills economy. The authors’ flexibility in thought mixed with a strategic energy will be an asset as we continue driving the discussion around the evolution of L&D.”

—**Jeff Miller**, AVP, Learning & Organizational Effectiveness, Cornerstone OnDemand

“The OK-LCD model is exactly what I need—a simple, comprehensive, research-based compass to help my team navigate the complexity we are currently facing in learning design. In today’s remote-first working environment, we have loads of programs to redesign and even more to build. *Designing for Modern Learning* aligns us all to a fresh, simple framework and a new, much-needed language so we can move swiftly and confidently. Instead of continuing to talk about how things need to change, this book will enable my team to move into action!”

—**Molly Brown Pickett**, Head, Learning Experiences, Facebook

“Has there ever been a moment in history when continuous learning was so necessary? Our changing world requires all working people to update their skills, and the traditional ways of doing so are no longer adequate. The new model presented in this book is prescient in responding to the emergent need for a transformation in corporate education.”

—**Gregg Fraley**, CEO, GF Innovation

Designing for Modern Learning

Beyond ADDIE and SAM

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PRESS

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To our husbands, Jeremy and Rich. We value your insights and cherish your support of us while we work. And we talk about you all the time when we're off on yet another modern learning business trip or video conference.

To our many colleagues who have trusted us enough to apply our models in your workplaces and have shared your stories of success and ideas for ongoing evolution. We are so glad we can all reinvent learning design together.

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Foreword

Crystal Kadakia and Lisa M.D. Owens do the learning and development field a great service in this book. Let me tell you why I think this is true. The L&D field is rapidly growing more complex. There is an increasing number of theories, models, analytical and evaluation vehicles, design and development tools, and methodologies. Learning professionals have built corporate education centers, developed and implemented a wide array of learning delivery technologies, taken steps to personalize learning activities, and provided performance consulting to assist with needs assessment and learning transfer. External learning providers are proliferating, and a dizzying array of learning resources are available on the Internet and delivered by training companies and universities.

In parallel, learning is now a top survival issue and more obvious competitive advantage for companies. And learning experts are becoming valued business partners, some in the C-suite, whose job it is to bring it all together.

In short, this is a very complex and complicated field whose contributions are increasingly key to business success.

So, both learning expertise and the need for learning is accelerating, and learning resources exist for almost any learning need. *But the resources are often not assembled in a way that supports change.* In addition, they often don't appeal to today's modern learners, who expect more accessible, social, and engaging formats. It is still true, for example, that in many companies the classroom—real or virtual—is the main delivery mode for learning programs, and they are often one-and-done or one-size-fits-all solutions. The ROI from learning is often unclear and sometimes disappointing, and it is still difficult to make learning's business case to leaders or to carry learning through to real action on the job.

What Lisa and Crystal do in this book and with their model is provide a framework that helps learning professionals address these challenges and manage this increasingly complex and strategically important talent development arena. Their model makes it easier to identify and combine the best learning resources to achieve business results. And it does this while helping you personalize and modernize learning for the people who can benefit from it.

Here is the scenario that their approach will help you bring about:

Imagine that everyone in your organization is surrounded by a curated variety of social, formal, and immediate learning resources—a learning cluster of resources (assets) that are directly targeted to building specific capabilities that are clearly related to personal and business success.

Imagine that the assets in these learning clusters range from the traditional (courses, books, learning groups, job aids) to the technology-based (video, virtual reality, apps, virtual meetings). And these clusters always include a mix of social, immediate, and formal activities that are selected by the learner based on their needs and wants. These assets include newly designed resources, as well as what's currently in your inventory or are available in the workplace, either in its original form or updated for the modern learner. In other words, new assets join with existing resources, resulting in a longer life for older assets. Everybody's learning—formal or informal—happens in a rich learner-centered environment.

The learners are surrounded by reconfigurable resources that were curated to help specific mission-critical personas achieve a strategic performance objective. It's a scenario that can triumph over the one-and-done, one-size-fits all approach to any company's learning.

The framework behind this scenario is the Owens-Kadokia Learning Cluster Design Model (OK-LCD for short). It presents an intriguing, practical, and systemic approach to organization and personal development through designed and curated learning. It's a simple model (five action-focused elements) to use deliberately and systematically, but not rigidly: the authors recognize the need for judgment and flexibility as you implement it. The model's five actions are:

- **Change.** Focus on real behavior change and results.
- **Learn.** Create personas to accommodate learner differences that relate to the objective.
- **Upgrade.** Modernize existing learning assets.
- **Surround.** Empower the learner with a meaningful learning cluster.
- **Track.** Strategically communicate transformation, not just usage.

One thing that I appreciate is that Lisa and Crystal reference and integrate others' ideas, building some of them into the details of their model (such as design thinking, Agile, and moments of learning need). Integration is a pattern that takes other forms in this book. For example, their learning clusters integrate all three categories of the 70-20-10 picture of how people learn (through daily experience, socially, and in formal learning situations). The authors also integrate learner choice and promote a view of measures that supports the collective impact of multiple assets and users. In the OK-LCD world, it's true that measures are for validation and continuous improvement. But there is also a big emphasis on using measures for communicating and marketing, as well as drawing learners into learning clusters. In other words, the authors' tendency is toward "both-and" rather than "either-or" thinking.

Lisa and Crystal are both engineers as well as learning professionals. So, what you get in this book is an analytical rigor tempered by a deep commitment to the human side (another "both-and"). You see this in the visual presentation of their OK-LCD model, which is teardrop-shaped incorporating a Venn diagram where parts overlap. Their writing has an engineer's precision, with clear and reliable chapter structures, and worksheets and diagrams to guide (assemble) the actions they propose. And they introduce some new terms that they believe add precision and signal us to wake up to a new idea or nuance.

But the book isn't a lifeless, jargon-filled manual. The authors draw you in using energizing language and stories that show their model in use.

At the beginning of this foreword, I said that Lisa and Crystal have done a great service to the field. The crux of that service is that they provide a new way to organize formal, on-the-job, and social learning into learning clusters that are tailored for the business and the modern learners who will experience them. Their framework addresses the full cycle of learning design, from the articulation of terminal and instrumental goals through to evaluating and communicating impact. It's also a no waste approach that provides a guide for updating and modernizing existing resources as well as adding new ones, including new technologies when they are fit for purpose. Worksheets and guidance in the book support a rigorous and rational approach to learning design. But the advanced learning professional will find plenty of space to improvise.

This book triggered many ideas for my work to help people to become smarter, more self-transforming learners and to build learning enterprises. I am sure you will find immense value for your own work—both as you learn about and implement the OK-LCD model and as it inspires your creative actions in this fast-transforming field.

Patricia A. McLagan
Organization Transformation Advisor and
Author, *Unstoppable You: Adopt the New
Learning 4.0 Mindset and Change Your Life*

Preface

A New Strategy for L&D

What would motivate two individuals to come together to write a book on modernizing learning? Two people whose key roles in life have been intertwined in the art of learning design. We both love learning, and even more so, we both love helping people connect the dots to have their own aha moments. This book is for those like us who are passionate about helping people grow and are constantly expanding their own thinking and skills at doing so. We like living and exploring at the edge, and we hope our readers do too.

We, like many others, have been waiting for this moment in learning and development. Businesses are focused on L&D more than ever to upskill the workforce as roles change rapidly and become more complex. Employees and new hires are demanding learning and development opportunities. Plus, there are all the new ways L&D can create and facilitate high-quality capability building through technology. We've seen the training industry evolve from sage on the stage style to more democratic and learner-centered styles. Yet, we've noticed that L&D hasn't quite made the leap into the modern digital age.

What's holding us back? Is it cost or time? Or perhaps turf wars between L&D, HR, IT, or other internal silos?

We think it's something more fundamental. We believe that L&D's job is changing and to leverage this moment in time, L&D will have to shift strategies. We are confident that the strategies in this book will help the L&D industry emerge as a key contributor to the business's success and as heroes to its employees. We also believe that it is you, our partners staying at the cutting-edge of L&D, who will make this happen.

The New Job of L&D

When we were challenged in 2015, to describe how to meet the needs of modern learners, we dug into learning research and uncovered the common L&D issues of the day. They all pointed toward a need for a fundamental change in what we see as our goal and how we get there. Our biggest insight was realizing that the instructional design industry was singularly focused on designing one thing—an L&D deliverable that would close the capability gap. It might take the form of a classroom training program, an e-learning course, learning program, or a manual, but it is still just one element. Of course, L&D often adds in a job aid or a link to additional content, but there isn't enough strategic thinking behind such additions. Our traditional and current instructional design models—such as ADDIE, SAM, Agile, and even design thinking—all inherently assume that the job of L&D is to create a single main deliverable.

We learned other things we weren't expecting. For example, the L&D industry is trying to meet today's needs using antiquated models and tools. Sure, they're great tools, but they're also three and four decades old! Even the changes L&D has adopted more recently—like CD-ROM training, web-based and virtual training, and blended learning—are just incremental modifications when compared to the technology-driven changes occurring in the world around us. While we access technology at home as reflexively as taking a breath, learning at work is far more out of reach. We are living in the middle of a revolution of disruptive innovation, and L&D needs to be an integral part of that movement.

Slowly, we started to see a new answer take shape. Modern learners want to be able to choose how, when, and where they want and need to learn. Therefore, L&D's new goal is to develop and deliver a learning cluster to replace the single-minded focus on one training deliverable per skill. A learning cluster is what we call it when L&D strategically designs and develops a set of learning assets to help learners gain a capability. This is what L&D needs to be able to do to level up for living, working, and learning in a digital world. It puts learning at a person's fingertips in a high-quality, personalized way. We in L&D need to use the available technology, but we have to do it intentionally, choicefully, and systematically.

With this approach comes a new language and a new way to talk about the products L&D creates. We'll deliver learning clusters instead of a class. We'll design learning assets instead of a learning session. We'll produce learning products that are available at various touchpoints for our learners, not just in the classroom or on the online training portal.

We shared this concept in workshops for several years. The learning cluster was very well received by participants, who then readily shared their own experiences as they developed learning clusters where they work. As usual, the teacher learns as much as the student.

The learning cluster evolved into the Owens-Kadokia Learning Cluster Design (OK-LCD) model. *Designing for Modern Learning: Beyond ADDIE and SAM* is a culmination of the knowledge we gained on this journey to provide a new strategy for L&D that works for modern learners and their businesses. We wrote it because we want to share our work with a broader audience. In this book, we'll show you how the OK-LCD strategy, model, and tools enable designs using your learning content that work and are scalable for the exponentially changing future.

Your Road Map to the Book

There needs to be a model or plan to guide L&D. We've developed that plan—the Owens-Kadokia Learning Cluster Design model—and we describe its iterative process in the next nine chapters.

Chapter 1 explains why L&D needs to, as we say, “join the revolution.” It helps describe what training professionals rarely have the time to consider—what has shifted in our world and what that means for us in L&D. Chapter 2 introduces a high-level view of a strategic solution for L&D—the OK-LCD model. We share that the OK-LCD model is both a new way of thinking and a new way of doing. We also explain the new way of a thinking for L&D.

Then in chapters 3 through 7, we dig into the model and how it works—by going through each of the five L&D Actions that make up the model. We tell a common L&D story that continues throughout these chapters and features the perspective of business leaders, L&D professionals, and learners. The story reveals current and common frustrations, while showing how application of the OK-LCD model can make a difference. Then we explain what the Action is all about and provide details about how to do it using a tool we've created for each Action.

We're also very proud of the "In Practice" sections featured in these chapters. These are real stories from real people who have adopted our model. We cover a diverse range of organizations, including the Gorilla Glue Company, Visa, and Bluescape. Not only are the results they've achieved incredible, but we know you'll learn a lot from reading about the real-life process to get there.

We also gathered what we've learned and pulled together a start-to-finish fictional example, which you'll see in chapter 8. It shows how each Action works together to create something bigger and shares the kinds of conversations L&D will have while implementing the OK-LCD model.

Finally, chapter 9 is about the future of L&D with the OK-LCD model. It describes the wins the telecommunications company Comcast has achieved by doing so much that aligns directly with the OK-LCD model. We also describe the barriers to getting to that future L&D state, and how to move through those barriers. We end the chapter by designing and presenting our own learning cluster for the OK-LCD model. Use it to guide your learning when, where, and however you want to learn.

You can read this book by starting at the beginning and reading through to the end, or you can choose your own path. Maybe you just want to read the first two chapters, then skim all the stories and examples. Or you might want to start with the tools at the end in the Appendix and then read the "The Action Implemented" sections, followed by the chapter 8 case study. Or maybe you prefer just reading the theory parts in chapters 1 and 2 and the "The Action Explained" sections in chapters 3–7. It's up to you. The point is, we've modeled what we preach. You have the option to learn when, where, and how you want. The headings and layout is designed to help you easily navigate the book to find what interests you most. Or if you want to do a deep dive, go grab your coffee and get immersed!

But the end is not the end. Learning is an ongoing thing. Living at the edge of L&D lasts a lifetime. So, we provide an appendix with our current tools for the model's five L&D Actions. And we provide support for bringing learning clusters to life through our ongoing work, which you can learn more about at LearningClusterDesign.com. There, we encourage you to join the community, get the latest templates, seek expert help for using the model, and share what you learn. When we write the next edition of the book, we hope to fill it with new stories and new insights from our readers as our model spreads and shapes the future of the L&D industry.

Welcome to *Designing for Modern Learning: Beyond ADDIE and SAM*. We're glad to have you join us on this revolutionary journey!

1

Mapping the Past and Present for the Future

modern learning is continuous, on the spot, craved, a part of everyday conversation, two-way, crowdsourced, contextual, and vital. When we ask people today about their relationship with learning—young, old, in the workforce, in school, at home—we find that learning is no longer a luxury to be indulged in at particular stages of life or career. Whether or not their employer or circumstance supports it, people crave remaining relevant, solving in-the-moment problems, and having the opportunity to learn whenever and wherever they need it. Now, with the advent of digital technology, this need, this zeal for lifelong learning, is as close as one's fingertips. People often talk about the recent podcast they heard or a new how-to video they watched when they needed to solve a problem. They contribute to the pool of knowledge by adding their own content. The introduction of digital technology grew the possibility, necessity, and hunger for lifelong learning.

In comparison, training is event-based, obligatory, one and done, top-down controlled, out of context, outdated, and scheduled.

While training and development professionals are the learning experts, it's quickly becoming apparent that our systems, history, and process enable us to be experts in only limited avenues of learning: primarily classroom and programmatic methods. As a result, the deliverables produced by our training departments are used infrequently, and the training department's resources are not the first, second, or third stop on an employee's journey to learning. According to Degreed's 2016 study of the anthropology behind how the workforce learns, employees are finding ways to learn weekly or even daily. Yet they use L&D-provided training, on average, only once a quarter.

Consider our industry’s typical approach and imagine the resulting perception by employees and by the business:

- We ask employees to learn on a schedule set by us.
- We take orders from our customers and leaders, often placing the highest priority on topics necessary to mitigate business risk.
- We often fail to voice our observations of what’s needed for higher performance or for the future of the business.
- We don’t focus on learner support outside the program.
- We create training and request content only from those we deem subject matter experts.

The resulting perception? All too often, training departments are seen as unable to meet the needs of digital-age learners and businesses. We lack the capability, philosophy, and process to pull together the optimal diversity of learning assets to meet the needs of the modern workforce we serve (Figure 1-1).

Figure 1-1. Two Contrasting Approaches: Traditional Training and Modern Learning



Training:
L&D’s Approach



Learning:
The Modern Learners’ Approach

The world has changed, and while our existing instructional design models have helped us in the past, it’s time for a new model to catch up to the here and now of learning. Without understanding the shifts in learning and business that have taken place, L&D professionals run the risk of being sidelined, unable or powerless to guide our organizations through the complexities and opportunities of the virtual age.

In this chapter, we describe the numerous, seismic shifts in learners’ realities and the transformations in structure and profitability that are revolutionizing our business organizations. We then consider the evolution of our L&D profession as we respond to our changing world.

Let's start by exploring a common story that is repeating itself today, in many forms, across our industry in companies and organizations. We'll revisit the organization in this story throughout the book. These stories reflect the issues L&D faces when using common approaches to designing learning. In later chapters, you will find some contrasting stories that highlight how reality shifts with our new model.

A Common L&D Story

Cast of Characters:



CEO
Doug



CMO
Raj



CHRO
Chris

The Scene: Doug and Raj are having one of their regular meetings.

"Raj, I agree that we have to take on this upgrade you're proposing if we're going to be successful with these new players," said Doug, CEO of the company, to the CMO. "But how can we build employee skills quickly enough to accommodate the change? One of my biggest headaches these days is finding and keeping employees to do the work, and then training them sufficiently to do the job right."

"I hear you, Doug," Raj said. "Hiring talent is harder than ever, and even experienced hires seem to need additional training to do their job. Heck, it takes three days just to get them out of the new hire training. Then, once we teach them how to do the job, they need more training to stay up to speed on the latest products and business systems."

Talent development was a challenge becoming all too familiar to the CEO.

"And what do we get for all this training?" Doug countered. "Chris tells me that employees like the training, and she has the numbers to prove it. But I'm not sure that all the training is making any difference. For one, I don't care if they like it or not; I just want them to be able to do the job. Further, I just read the summary of exit interviews for the last fiscal. One of the top complaints, right after 'I should be promoted,' was that more than 60 percent said, 'Provide more training and development opportunities.' So, despite a 10 percent bump up in staffing for the training department, and a big increase for the new training software, employees continue to say they aren't getting enough training and development."

"But do the employees even take the training?" Raj wondered aloud. "Everyone I talk to is way too busy to take any training. It's a big deal when someone takes two days off to attend a course. A few people have said they like the webinar trainings because they can multitask during the course."

Doug gave a wry grin. "Well, that sounds very educational! So, what are we getting for our investment in training? I'm reading in *Harvard Business Review* about leaders being the teachers and

about success with peer-to-peer learning. Maybe that's the answer: Cut out the middleman; cut out L&D for everything but compliance and employee onboarding."

Raj nodded in agreement with his CEO. "I've been reading about virtual reality training and algorithms that can tell just what an employee needs to know. Maybe we should be investing in a more modern learning organization," he suggested. "Or maybe we should give the job to someone in the IT department. At least they can connect their spending to some type of ROI."

The Issues:

- Is L&D becoming irrelevant to the business? How can we change that?
- Should we eliminate L&D and move to a different learning model, such as peer-to-peer learning or leaders as teachers?
- How can we upskill employees quickly to achieve our company goals?
- How can L&D organizations deal with requests for even more training?

Shifts in Learning

We all often discuss the Internet, computers, and mobile devices and remark on how things have changed dramatically. But what exactly has changed, and what is the impact these changes have on learning? Historically, prior to digital technology, learning was presented in written form (textbooks, job aids) and, after the invention of the television, in one-way video. It took time to create learning materials in these formats, and not everyone had the capability or availability to do so. Traditional instructional design models were made for this historical world—and its limitations. Training departments' customers—the learners and the business—aligned their expectations to the same limitations of that time.

Digital technology has changed the face of training delivery and use. While L&D people tell us that they feel the shift, we all struggle to articulate just what has happened and how to react. Yet, identifying what shifted is the first step in formulating a strategic response. That is what we set out to do. This chapter describes the four shifts we have identified. The next chapter is a helicopter view of the strategic response we formulated in the Owens-Kadokia Learning Cluster Design (OK-LCD) model. The four primary shifts are:

- when and where learning happens
- who creates and delivers training
- how we find information
- how we ensure information is reliable.

When and Where Learning Happens

In the not-too-distant past, individuals had three primary ways to learn. They could read a physical book anywhere, anytime; locate an expert to guide them; or find an in-person class. The learning options were quite limited. Today, digital technology allows people to learn whenever and wherever they are,

with increasingly sophisticated tools that more fully mimic the classroom experience. Especially with advances in areas such as virtual and augmented reality, immersive learning experiences can and are being designed for both technical and soft skills. (For more on virtual reality and future tech examples, see chapters 6 and 9, respectively.)

Who Creates and Delivers Learning

Once upon a time, the barriers to sharing knowledge were high. Experts had to be found and approved before they would be given the opportunity to author content or teach a course. The tools to create content were costly and available only to specialized businesses, such as publishers, or to internal functions that chose to pursue media creation. Today, digital technology allows anyone to create content using the ubiquitous smartphone, and to converse with whomever they deem an expert, not just those selected by their organization as subject matter expert. Crowdsourcing content is acceptable, if not encouraged and expected.

How We Find Information

There was a time when employees had no choice of where to go for information. To learn something new, they went through their training departments and a few course catalogs, or they attended conferences provided by professional associations. They searched libraries via the card catalog, and were dependent on whatever was available there. The knowledge pool was limited, so the demand for learning materials was naturally high. Today, with powerful search engines, a global network of content and content providers, and advances in artificial intelligence (AI), employees have a lot of options that are sorted and filtered for them instantaneously. (For more on AI, see chapter 5.)

How We Ensure Information Is Reliable

With lower barriers to who creates content, the possibility of misinformation increases. Today, we all rely on the crowd to tell us what's good and what's not. Rather than trusting media creators to present us with experts, we rely on one another to filter and review data. While this can initially sound risky, with more and different voices, our social systems reflect more diverse thinking and less biased points of view.

Each of these four shifts creates new expectations for learning opportunities. The shift in when, where, and how we find information leads people to expect continuous, contextual learning. The shift in how we ensure that information is reliable drives an expectation for learning to be two-way and crowdsourced. Where learning was once limited by time, space, and resources, today we expect it to be at our fingertips.

Shifts in Business

Digital technology hasn't changed expectations only in learning and development. It has also been hard at work transforming organization structure and profitability. Systems rooted in the industrial age were shaken by new and disruptive business models made possible in the digital age. To remain viable, businesses are adapting to the following four key environmental shifts, creating new demands on their talent:

- exponential rate of change
- when and where work gets done
- demographic shifts
- types of work.

Exponential Rate of Change

Moore's Law, an observation by Gordon Moore that the number of transistors on a chip would double while costs halve every two years, drove the last 50 years of exponential technology change. While there is debate whether this trend will continue, there is no question that new technologies will persist in disrupting and transforming life as we know it. Business leaders have the tough task of adapting their organizations to the latest change while keeping a keen eye on what the future might hold. Business as usual is no longer an adequate strategy.

When and Where Work Gets Done

Similar to the anytime, anywhere possibility of learning, work is more than ever on the go. No longer limited to the assembly line, work and profit are tied to more cognitive and relational work. According to a 2019 survey by the International Workplace Group, 70 percent of employees work at least one day a week somewhere other than the office, and more than half work remotely at least half of the week. And businesses report that flexible working strategies increase business growth, competitiveness, productivity, and the ability to attract and retain top talent. A two-year study published in the *Quarterly Journal of Economics* verified that there was an impressive increase in work productivity among people who worked from home (Bloom et al. 2015). This affects HR policies, including pay, performance management, hiring and firing, and of course, how people learn. Work is more global and mobile than ever.

Demographic Shifts

The workplace is experiencing a massive demographic shift. Experienced talent is aging—either retiring and taking their capability with them or staying on the job and requiring new or updated skills to stay relevant. New talent is entering the scene, with Generation Z (born between 1995 and 2015) expected to make up an ever-growing part of the workforce by 2025. Given the talent pool's dramatically different digital technology experiences, leaders and managers cannot expect employees to carry the same understanding of values, etiquette, motivations, and thought processes. Amid these differences, organizations must consider how to transfer knowledge effectively across all generations.

Type of Work

A Deloitte study showed that how companies generate profit has shifted from activities related to tangible goods and equipment to activities related to intangible services, cognition, and insight (Benko, Gorman, and Steinberg 2014). When the type of work changes, so do the types of employees, the organizational structure we place them in, and the tools and training we provide. Organizations regularly compete for employees with desirable, complex skill sets. Now, even the information economy is transitioning to the human economy. With the routine and highly analytical tasks people do today being done better and more accurately by robotics and AI, talent is shifting their types of work to contribute differently in a world of technology. Here is how Dov Seidman (2014) described it:

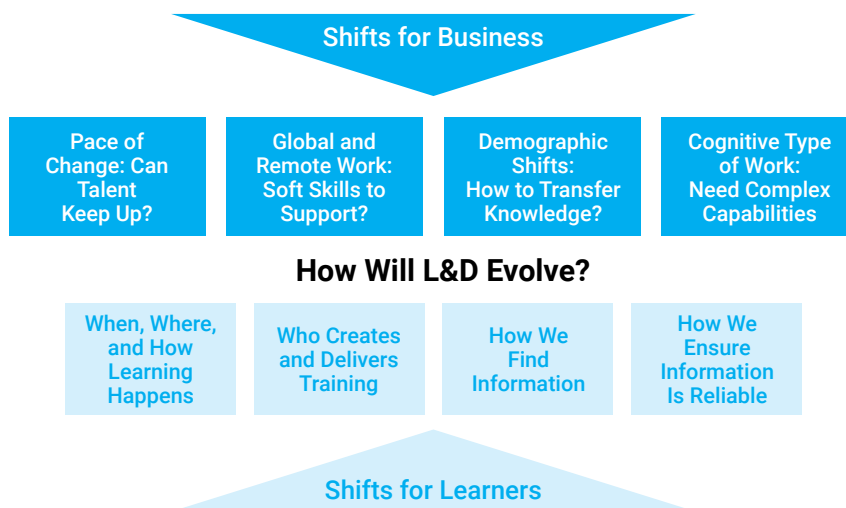
In the human economy, the most valuable workers will be hired hearts. The know-how and analytic skills that made them indispensable in the knowledge economy no longer give them an advantage over increasingly intelligent machines. But they will still bring to their work essential traits that can't be and won't be programmed into software, like creativity, passion, character, and collaborative spirit—their humanity, in other words. The ability to leverage these strengths will be the source of one organization's superiority over another.

The output needed from talent in the industrial age was focused on efficiency, repeatability, and tasks. As a result of the shifts of the digital age, organizations need talent to have new capabilities:

- Reskill or upgrade at the pace of innovation.
- Demonstrate soft skills that work virtually and across demographic or regional boundaries.
- Handle more complex, ambiguous tasks.

These four shifts for the business also affect L&D professionals—our purpose, our products, and our own skill sets (Figure 1-2).

Figure 1-2. How Will L&D Evolve?

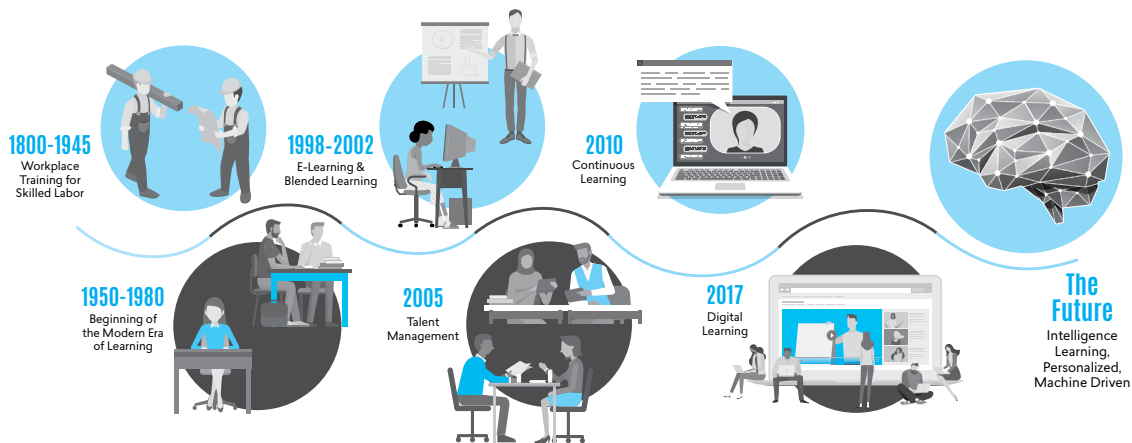


Where once they produced training for job onboarding to improve time to productivity, compliance training to avoid business risk, or technical and job-related training critical for business operation, today the business has new, emerging learning needs. But because these new needs are things that training departments did not historically do, many businesses do not realize that L&D can do them, and do them well! We are the learning experts, and we must and can step up to fill these gaps in this new world. If our businesses and our learners have to adapt, what’s stopping us from adapting to these shifts?

Trial and Error: L&D’s Attempts at Evolution

Our industry has a history of listening to the business need and adapting. Like businesses of the industrial age, training is a very structured field, designed for efficiency. It’s in our culture and goes back to our historical roots. The training industry emerged during and after World War II in a time of expanding technological innovation, a period of collaboration between industry and the U.S. War Manpower Commission. The goal was to produce military equipment as fast as possible by upskilling a high volume of workers efficiently. Later, instructional design models were established to help provide structure and consistency to what had been an amorphous, unreliable process. Learning was based in the classroom or on the job. Since then, although contexts for learning have changed, our instructional design models have struggled to help create rigor and quality experiences in this new world—where content changes faster than training can be generated. Take a look at the infographic on the evolution of talent development (Figure 1-3).

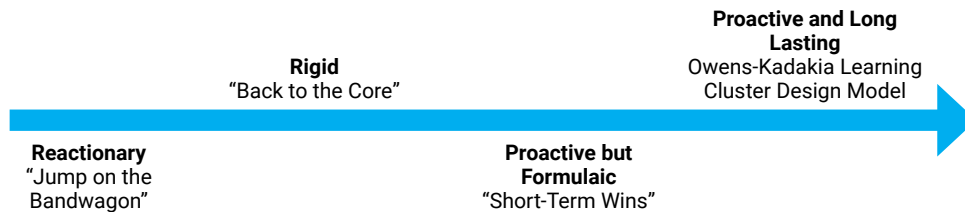
Figure 1-3. The Evolution of Talent Development



The infographic shows us that our industry has evolved again and again to meet the current needs. It also shows how changes are coming at us faster than ever. Rather than every 150 or even 48 years, we are now making a dramatic shift, on average, every five years. It’s no surprise that many of us rate ourselves as 10 or 20 years behind the times—and wonder if we’ll ever catch up.

In our work and collaboration with companies, we've observed three strategies training departments employ in reaction to the changes of the digital age (Figure 1-4).

Figure 1-4. Three Common L&D Strategies in Reaction to the Digital Age



Strategy 1: Reactionary

It can be argued that reactionary means not having a strategy at all, and in fact, this is what we see with some training departments. Overwhelmed by the changes, these departments invest in the latest technologies, directed by alluring whitepapers, conferences, and quick comparisons to leading companies. Often, these investments are sold as a business case, but are not thought through from an implementation standpoint. Employee usage never quite takes off. Doing what's sexy in the moment leads to an anxiety-filled, unsuccessful training department.

Strategy 2: Rigid

Some training departments become more insular in the face of these changes. Their motto is "Let's get back to our core expertise." To maintain relevance, they feel that honing their existing skills is where they can and will continue to add value to their organizations. These training departments continue to be treated as order takers while the business looks to other sources to meet its talent development needs. Their deliverables continue to solely take the form of classroom instruction, manuals, job aids, and, grudgingly, e-learning.

Strategy 3: Proactive, but Formulaic

The last strategy holds the most promise, but still falls short. In this strategy, training departments are using new prescriptive models based on the latest thought leadership. Unfortunately, most of these new models are still focused on telling designers what to create, often through formulaic approaches. Prescriptions for e-learning design, bite-size learning, blended learning, and the overall mix of learning might meet an immediate need, but leave the organization vulnerable to future changes.

An L&D Strategy for the Next 100 Years

You are likely familiar with the three strategies we've described and are even able to place your own L&D organization on the scale. The training industry, encumbered by fear of a significantly different era

or a desire for quick wins, struggles to find an approach to evolve strategically. Is there a strategy that can help training departments effectively evolve in light of these changes? An approach that can serve as a long-lasting foundation for designing learning for the next 100 years? We believe there is a fourth approach: a proactive, process-based, long-lasting philosophy. We believe the Owens-Kadokia Learning Cluster Design (OK-LCD) model is the answer. The OK-LCD model is both a philosophy and a process. In this philosophy, we don't focus on telling L&D "what" to create for a digital age; we focus on building capability around the thought process—the "how" and "why" for a digital age. OK-LCD encourages rigor coupled with a mentality at the speed of business. We start by removing the limiting assumptions we've historically made in the industrial age and work with the reality of what training can do today.

Before and After: A Modern L&D Organization

Our organizations are desperately looking for help. The *2017 Deloitte Global Human Capital Trends* report shared that 70 percent of CEOs say their organizations do not have the skills to adapt to today's environment, and 42 percent of Millennials say they are likely to leave their organization because they are not learning fast enough. Yet CEOs are not experts at evaluating skills gaps and crafting learning. They are waiting for someone—an expert—to tell them what needs to be done in this tough reality. Frustratingly, in the *2017 LinkedIn Workplace Learning Report*, fewer than a quarter of L&D professionals were willing to recommend their own L&D organization to peers. When L&D serves as order takers, we assume someone else is a greater expert than us at learning! But why would finance, marketing, engineering, or operations leaders be able to perform this role better than we can?

If we in L&D change the way we approach our job, what is possible for the future of L&D? Imagine a future L&D that collaborates with leadership and other talent development functions to determine the most business-critical capability needs as being the norm across the industry. In these strategic conversations, the future L&D owns and can articulate the highly valuable data on what employees have been motivated to learn so far and where progress has been slow. The future L&D is not seen only as a resource to mitigate business risks through training, but as the vehicle and leader in meeting the business needs and creating a learning culture.

From an employee point of view, this future L&D is on top of the latest technologies, but more important, uses historic L&D expertise to structure learning experiences. Rather than receiving random information through a frustrating smorgasbord of technologies that is tough to navigate and hard to find, employees know that L&D has made sure that there are easy-to-find, meaningful ways to grow their capability. This future L&D is a seamless supporter of their ability to perform on the job. When they need something, they use the L&D-provided avenues to find it.

Final Notes

“Learning is an experience. Everything else is just information.” –Albert Einstein

The training industry has evolved over time, but the pace of change is increasing, just as it is for our learners and businesses. The future of L&D in a digital age is about unleashing human potential rather than reinforcing quality, routine work. To date, the strategies to evolve have been insufficient to help the majority of L&D. However, by identifying the primary shifts for learning and business, L&D could be a central, vital capability for the organization—if we choose to evolve and move past our own resistance to change. L&D is being called to a higher level of service and capability. Will you answer that call? To learn how, let’s continue to the next chapter, where we introduce the Owens-Kadokia Learning Cluster Design Model.

Reflect

- ◇ How have you witnessed the shifts in learning? Shifts in business? What impact have these shifts had on your training organization?
- ◇ Looking at Figure 1-4, where would you place your organization on the training industry strategy spectrum? Why?
- ◇ How would you like to see L&D serve the organization in the future? If you consider your wildest dreams, what do you envision as L&D’s role?

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Crystal Kadakia is a two-time TEDx speaker, organizational consultant, and bestselling author known for transforming the toughest workplace changes into exciting possibilities for our digital world. As a consultant, she brings organizations into the digital age, reimagining people strategies with clients in areas such as career development, learning culture, inclusion, leadership development, and employee engagement. Past clients include General Mills, Southern Company, Monster.com, Sierra Club, and other organizations.

Her academic background includes a bachelor's degree in chemical engineering and a master's in organization development. After six years working for Procter & Gamble, she began a consulting firm where she has tackled transforming the status quo and bridging gaps between people in the workplace.

Through her bestselling book, *The Millennial Myth: Transforming Misunderstanding into Workplace Breakthroughs*, and keynotes, Crystal has spent the past decade changing the story for thousands around the generation gap. Along with supporting clients, her next project is a deep study of living and leading in the digital age, including practices that help people create connection, emerge from burnout, and balance the role of technology in our day to day lives.

Crystal is a Power 30 Under 30, CLO Learning in Practice, and ATD One to Watch award recipient. Originally from Austin, Texas, she is now based in Atlanta, Georgia, with her husband, Jeremy, where they love immersing themselves in nature and cultural experiences.



Lisa M.D. Owens is a learning expert who combines her engineering mindset with her deep interest in instructional design and learning sciences to create training that moves business forward.

Following successes in engineering, consumer research, and quality at Procter & Gamble, Lisa was asked to create global training systems. She upskilled with a master's of education and quickly become P&G's top training professional, leading a broad range of cutting-edge internal programs.

After retiring from P&G in 2011, Lisa partnered with Crystal Kadakia to research and solve some of the issues facing L&D in the modern age. This work resulted in a highly rated course on modern learning design. Lisa also co-authored *Leaders as Teachers Action Guide*, *Your Career: How to Make it Happen*, 9th ed., and *Lo Start-Up Di Una Corporate*

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Lisa holds a bachelor's degree chemical engineering from Georgia Tech in addition to her MEd. Prior to joining P&G, she cooped at the Savannah River nuclear facility. She is also active in church education and was the lead instructional designer for a nationwide, multiday youth leadership training program. Her youth leadership work continued with her partnership with Helen Chen, founder of China Capable Teens.

In the winter you can find Lisa in Cape Coral, Florida, and she spends warmer months in Ellicott City, Maryland, with her grandchildren. Throughout the year, she and her husband like to travel, with typical destinations being wineries, National Parks, or outdoor and cultural experiences.

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