KARL M. KAPP

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MICROLEARNING

SHORT AND SWEET

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Foreword

Why We Wrote This Book

At first, the notion of writing a book on microlearning was a bit preposterous. Shouldn't we just apply the microlearning concept we are writing about to develop the material? After all, isn't a book something you sit down and read over the course of several hours? If you had to make the comparison, that feels more like a full-length training program. Why wouldn't we chunk the content into tiny portions, convert to PowerPoint slides, add some narration, and post it online? Isn't that what microlearning is all about?

Well, to be honest, no. That's why we decided a book was needed to demystify what microlearning really is, to offer all the learning theories and research that support it, and to present an actionable road map for planning, implementing, designing, and evaluating it.

All learning approaches need defined foundations, valid theory and research to support the method, and a look at the development process from analysis through to evaluation. We know microlearning is trending, and many are enthusiastic to adopt it. However, we also get that not everyone knows how or why to use microlearning. And even more important is to ask, should they?

Today, there is little that provides the comprehensive background necessary to make informed training design decisions about microlearning. In doing our research, we found nuggets of great information on the topic, but not a comprehensive guidebook to assist in making those efforts actionable.

We wouldn't implement an entirely new approach to learning without doing the upfront research or perhaps a pilot to determine its value for our organization or client. Why would you do that with microlearning? That's why we wrote this book, to provide that beginning for you.

Microlearning may seem like just another item to put in the instructional designer's (ID's) toolkit; use sound instructional design practices, plan the initiative, and off you go! However, that method may only work for a small minority of IDs. With any learning approach, there are nuances you must recognize because they alter our standard methods of developing learning. Microlearning is no different.

For example, the idea that microlearning is a quick and easy way to jazz up a stale learning program is a bit of a myth. Microlearning can actually take just as long, if not more time, to develop and implement. This is because microlearning is typically distributed over a period of time. If that's not what your organization does for standard implementation, it may woefully underestimate the resources necessary for executing the solution. It's not always as simple as uploading a program into a learning management system (LMS) and providing notice of a new course. It could take time every week, month, or business quarter to create and launch the microlearning initiative your organization created.

What we are saying is that microlearning needs as much attention from an instructional design standpoint as any other form of training. Keeping this in mind will help keep microlearning from being another

"learning trend" your company attempted to adopt but failed. If this has happened, we hope this book provides the confidence you need to give microlearning a much deserved second try!

The Best Way to Read This Book

Microlearning: Short and Sweet is designed to accommodate the novice through to the pros. The practical approach to the topics provides an opportunity to pick and choose what you need to answer your most immediate questions on the subject—or to dive deeper to gain a more comprehensive understanding.

No matter your level of familiarity with microlearning concepts, we encourage all readers to start with chapter 1. We not only provide examples of microlearning, but we dive into what microlearning is and is not to help clear up any misconceptions. Additionally, we've compiled several definitions of what microlearning is and developed a common set of characterizations that allowed us to operationalize a standard definition. Reviewing this chapter first, whether you're tenured in training development or new to the topic, ensures that as you read other chapters you have the appropriate context.

Now, from there it depends on what you are seeking to know or do. If you are a traditionalist in reading books, the layout of the chapters provides a logical path through the subject matter. Chapter 2 digs into the learning theory and domains that microlearning complements. Chapter 3 highlights the use cases of microlearning. Then, chapter 4 offers a primer on microlearning from a "why it works and when to use it" perspective. Having an idea of what you are hoping to teach, train, develop, and so on in the back of your head while you read these chapters will help you visualize which principles and practices will work best for your subject matter.

Chapters 5, 6, 7, and 8 get to the "hands dirty" part of microlearning: creating, designing, implementing, and evaluating microlearning products. To help elaborate the key concepts of each chapter, we have woven in case studies that were generously shared by peers leading the way in microlearning. There are a lot of folks out there doing great things with microlearning, and each case exemplifies points we make throughout the book.

With each of these chapters we look at the design and development process, not only from its impact on the learner, but also its impact on the learning developer. Our years in the field have taught us that we must be realists about what we can do as learning development professionals, given the organizational constraints and interdependencies we're presented with. We want the best for our learners, but as the developers, we know we must work under certain constraints.

We conclude the book with a recap of the key takeaways from each chapter and then take a brief look at what the future may have in store for microlearning design and development.

We hope this book fuels your creative mind to see the endless possibilities for microlearning in your organization.

SECTION 1
FOUNDATIONS

1.
What Is Microlearning?

Chapter Questions

At the end of this chapter, you should be able to answer:

- What is microlearning?
- What is microlearning not?
- What are some examples of effective microlearning?
- What are the advantages of microlearning?

Is microlearning a text message? Is it a video? Does it need to be shorter than five minutes? Is it just "chunking" a course into smaller pieces? Is it bigger than a breadbox? Is it larger than a molecule?

Many questions swirl around the term *microlearning,* and until recently, there were few answers. Or, more precisely, few answers could be found in one place. Here we attempt to converge all the definitions, research, practice, and implementation of microlearning into a single guidebook, providing a road map for you to visualize, create, and deploy the microlearning you need. We're offering the short and sweet of microlearning.

Microlearning in Action

Let's start with examples of the concept of microlearning. Perhaps you already have a definition. As you read the following scenarios, see if your definition aligns with them (and know that it might not fit all instances). If you don't already have a preferred definition, be prepared to glean a lot of what microlearning is, because the idea has many layers.

Persuading Healthier Living Habits

Diabetes is a serious illness. Fortunately, in many pre-diabetic individuals, type 2 diabetes can be prevented by lifestyle modifications, such as additional exercise and cutting down on sugary foods and beverages. To that point, researchers studied the effects of microlearning's ability to alter the lifestyles of Indian men with impaired glucose tolerance.

The participants were randomly assigned to either a control group or a mobile phone messaging program. The test group received two text messages a day encouraging them to eat right and exercise. The control group received a standard one-time training and education program, during which they received information about eating correctly and the value of a modified lifestyle to prevent the onset of type 2 diabetes.

After two years, the cumulative incidence of diabetes was lower in those who received text messages than in the control group. The results were statistically significant. In fact, the microlearning presented to the men twice daily resulted in a relative risk reduction of 36 percent (Ramachandran et. al 2013).

Increasing Employee Engagement and Having Fun

Intercontinental Hotels Group (IHG) is a global company including nine hotel brands in nearly 100 countries. Their vision is to become one

of the great companies in the world by creating "great hotels guests love." The company values its people and believes quality is important. So, it wanted to explore innovation in the area of training for existing members of the quality team. It also wanted to improve on the consistency and knowledge base of its employees.

IHG decided to use a gamified platform called mLevel that would provide "missions," or microlearning modules delivered with traditional game elements such as points and leaderboards but also with a game interface. Employees could play games and learn about quality.

The team selected for training was located in North America and Latin America; each team member (called a quality consultant) is responsible for maintaining quality standards at the up to 60–70 IHG hotel properties they each serve. The team director had two goals for the program: to engage the quality consultants to participate in training and enjoy it, and to measure their knowledge attainment by assessing where they started out versus what they learned after completing the training program.

Results showed that the program worked in terms of motivating the team—when asked about their motivation to play, 64 percent of the team members wanted to increase their knowledge and skill of brand standards, and 29 percent were motivated by their love of competition and wanting to be the best. According to a survey of the team members, 100 percent of the participants were interested in using games and microlearning for future program and process roll-outs. Additionally, the participants would recommend the gamified solution to a colleague 9.2 times out of 10. In answering a survey question about whether they had fun playing and learning, the result was a score of 4.4 out of 5 (mLevel 2015).

Offering Post-Instruction Product Review

Juan has just watched the new product launch. He is overwhelmed by the amount of information that was presented during the hour-and-a-half webinar, and now he needs to memorize the features and functionality so he can begin selling it effectively. How is he going to do that when he was barely able to remember everything from last month's product launch?

Fortunately for Juan, his company has just implemented a new educational app to help with product launches. Every day for four weeks, Juan receives a message encouraging him to answer three multiple-choice questions about the new product launch. The questions are timed, so he has to be quick to answer; to make things even more intense, he is competing against other salespeople in the organization. He has to be fast and correct with his answers to climb up the leaderboard.

Juan is doing alright—he isn't at the top of the leaderboard, but he's not at the bottom either. What Juan likes best is that he's recalling the information and concepts from the questions every time he is on a sales call. He is learning the information almost effortlessly and is even having fun answering the questions. The app presents questions he answers incorrectly more frequently than those he gets right. He also has begun studying the company's website, so he can be prepared to answer upcoming questions. His next goal is to move up on the leaderboard.

But Juan isn't the only one noticing the usage or engagement with the app. In fact, his firm is noticing some dramatic advantages. For one, after the initial 90-minute webinar, the sales force was in the field selling, not sitting in a classroom or behind a computer learning about the new product.

Second, they noticed that compared with all the launches done in the two years before this one, the sales team built one of the quickest

pipelines for this product ever. The approach of quizzing sales people with product information on a daily basis both improved product knowledge and helped the team build the sales pipeline quickly and effectively.

Prompting Recall of Procedures

Having only been on the job for two weeks, it was hard for Jane to remember every little detail about how to take a customer order. She had to remember how to check the credit score, how to look up the right product when the customer didn't know the product number, and how to properly save the order and open another when a new customer was on the line.

When it was time for her first return, she got nervous. She vaguely remembered something about customer returns from the training class, but she could not remember exactly what she needed to do; her palms were starting to get clammy. Fortunately, as she looked at the queue of incoming calls, she also saw the button next to the caller ID, which said, "Review Returns." When she clicked the button, a short, 15-second video appeared reminding her of the steps that she needed to take and what was required from the customer for a return.

After watching the video, she took the call from the customer. Within two minutes, she was able to handle the return, refund the customer's credit card, and move on to the next call.

Practicing for Academic Pay-Offs

Ashley was studying organic chemistry and ran into a road block. She was having major trouble recalling all the terms and definitions. She couldn't remember the difference between *dissociation* and *disproportionation*, not to mention the definition of *tautomerism* and a hundred

other terms. She needed a methodology to wrap her head around all these terms and definitions. Luckily for her, she had three classes with the smartest first-year student, Nancy.

One day over lunch, Ashley asked Nancy how she had memorized all those organic chemistry terms. Nancy said that she had downloaded a flash card app and entered every term and corresponding definition from the textbook into the app. Now, she quizzes herself daily on the terms, taking advantage of the app's ability to track which definitions she gets right and which she gets wrong.

Flashcards? Ashley was a little skeptical. She thought that was an elementary school trick, not something for a serious topic like organic chemistry. Nancy disagreed—she knew a lot of chem and bio majors who used flash card apps, and even had friends in medical school who used them.

Ashely decided to give the app a try and was amazed at how much better she performed on her next organic chemistry test. She now uses digital flash cards for every class, and is well on her way to making the Dean's list for the first time ever.

So, are these the types of examples that come to mind when you think about microlearning? Have they expanded your idea of the concept? Have they narrowed it?

Our examples show the potential we have to change behaviors, increase knowledge, and hone skills in mere minutes every day. We can do this by creating quick, meaningful interactions through games, quizzes, flashcards, videos, and text messages. We can push microlearning to learners or, as learners, we can pull microlearning to help ourselves. In

summary, microlearning relies on a goal or objective, interactions, and the delivery mechanism for its success. We'll dig into these attributes next by defining *microlearning*.

What Is Microlearning?

It turns out that defining microlearning is not as simple as you might think. The current reality of microlearning is that it's constantly evolving and changing. Vendors, educational institutions, and training departments are working hard to implement a somewhat nebulous and elusive concept. But when it comes to microlearning in general, many professionals ask, "What exactly is it?"

Many have defined the concept of microlearning. Here are a few:

- Carla Torgerson, a pioneer in the microlearning space and author of *The Microlearning Guide to Microlearning*, defines it as "A piece of learning content that can be consumed in no more than five minutes" (Torgerson 2016).
- Shannon Tipton, a knowledgeable and well-known expert in microlearning, provides this insight: "Your microlearning creation will need to address the desire of people to learn any time in any place, placing people in control of their learning destiny. Microlearning is simple, short, and engaging. This is not to say we are 'dumbing down' learning for the sake of being short or narrow focused. Quite the opposite. When appropriately applied, microlearning can allow for deeper encoding, reflection, and practice retrieval—all necessary for the successful exchange of knowledge and learning application" (Tipton 2017).
- Author Theo Hug offers a slightly more academic take on microlearning. In his chapter in *Didactics of Microlearning*,

Helmwart Hierdeis sums up Hug's definition of microlearning as "an expression of a specific perspective which, in contrast to meso and macro aspects, is directed towards relatively small and time-restricted learning units and activities." Hug primarily defines microlearning as not being meso, which is an intermediate level of learning design (course level), or macro, which is at the global or overall curriculum level. It's the smallest instructional unit (Hierdeis 2007).

- JD Dillon, chief learning architect at the microlearning platform company Axonify, has been working with microlearning for more than 10 years. He uses the following to define microlearning: "Microlearning is an approach to training that delivers content in short, focused bites. To be effective, microlearning must fit naturally into the daily workflow, engage employees in voluntary participation, be based in brain science (how people actually learn), adapt continually to ingrain the knowledge employees need to be successful, and ultimately drive behaviors that impact specific business results" (Dillon 2018).
- Learning expert Will Thalheimer describes microlearning as "relatively short engagements in learning-related activities—typically ranging from a few seconds up to 20 minutes (or up to an hour in some cases)—that may provide any combination of content presentation, review, practice, reflection, behavioral prompting, performance support, goal reminding, persuasive messaging, task assignments, social interaction, diagnosis, coaching, management interaction, or other learning-related methodologies" (Thalheimer 2017).

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Karl M. Kapp, EdD, is an international speaker, scholar, writer, and expert on the convergence of learning, technology, and business with a focus on game-thinking, games, and gamification for learning. He serves as a professor of instructional technology at Bloomsburg University in Bloomsburg, Pennsylvania, where he teaches several graduate courses and serves as the director of the university's Institute for Interactive Technologies. The institute works with businesses, nonprofits, and other organizations to help them create interactive and meaningful instruction.

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Karl has received several industry awards, including the ATD Distinguished Contribution to Talent Development award, which honors those who have had a sustained impact on the talent development field. He was also named one of LinkedIn's Top Voices in Education in 2017 and received the eLearning Guild's honor of becoming a Guild Master in 2018. Karl has been a TEDx speaker and author of eight LinkedIn Learning courses including "Learning How to Increase Learner Engagement." He believes that play, creativity, and game-thinking leads to innovation, productivity, and profitability. Follow Karl on Twitter @kkapp.

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Robyn's a self-proclaimed geek for industry data that provides insight into the how, what, and why of learning and development. She is an advocate for learning and development teams and helping them understand their own challenges and capabilities for success.

As an adjunct professor with LaSalle University, Robyn teaches the art, science, and business of instructional design and the management of its learning and development projects. She also enjoys volunteering and mentoring emerging TD professionals from Bloomsburg University's instructional technology program, of which she is a proud alum.

Robyn's portfolio includes a range of industries and sectors, including major health and insurance systems and pharmaceutical sales, research, and manufacturing. She has also assisted multiple startups, higher education departments, and state and government agencies and programs.

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