



Michael Allen's Guide to  
**e-Learning**  
SECOND EDITION

Building Interactive, Fun, and Effective  
Learning Programs for Any Company

Michael W. Allen | Foreword by Tony Bingham

**atd**  
PRESS

**WILEY**

# **Michael Allen's Guide to e-Learning**

**SECOND EDITION**

**Building Interactive, Fun, and  
Effective Learning Programs  
for Any Company**

**Michael W. Allen**

**WILEY**

This book is printed on acid-free paper.

Copyright © 2016 by Michael W. Allen. All rights reserved

Published by John Wiley & Sons, Inc., Hoboken, New Jersey

Published simultaneously in Canada

No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, scanning, or otherwise, except as permitted under Section 107 or 108 of the 1976 United States Copyright Act, without either the prior written permission of the Publisher, or authorization through payment of the appropriate per-copy fee to the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923, (978) 750-8400, fax (978) 646-8600, or on the web at [www.copyright.com](http://www.copyright.com). Requests to the Publisher for permission should be addressed to the Permissions Department, John Wiley & Sons, Inc., 111 River Street, Hoboken, NJ 07030, (201) 748-6011, fax (201) 748-6008, or online at [www.wiley.com/go/permissions](http://www.wiley.com/go/permissions).

**Limit of Liability/Disclaimer of Warranty:** While the publisher and author have used their best efforts in preparing this book, they make no representations or warranties with the respect to the accuracy or completeness of the contents of this book and specifically disclaim any implied warranties of merchantability or fitness for a particular purpose. No warranty may be created or extended by sales representatives or written sales materials. The advice and strategies contained herein may not be suitable for your situation. You should consult with a professional where appropriate. Neither the publisher nor the author shall be liable for damages arising herefrom.

For general information about our other products and services, please contact our Customer Care Department within the United States at (800) 762-2974, outside the United States at (317) 572-3993 or fax (317) 572-4002.

Wiley publishes in a variety of print and electronic formats and by print-on-demand. Some material included with standard print versions of this book may not be included in e-books or in print-on-demand. If this book refers to media such as a CD or DVD that is not included in the version you purchased, you may download this material at <http://booksupport.wiley.com>. For more information about Wiley products, visit [www.wiley.com](http://www.wiley.com).

***Library of Congress Cataloging-in-Publication Data is available:***

ISBN 9781119046325 (Paperback)

ISBN 9781119046394 (ePDF)

ISBN 9781119046332 (ePub)

Cover Design: Wiley

Cover Image: Scott Colehour, Solutions Architect at Allen Interactions

Printed in the United States of America

10 9 8 7 6 5 4 3 2 1

“Quite simply, if you are designing e-learning, you should be following Michael’s earned, respected, and apt advice. In this updated version of his classic, he points out the dearth of and need for, good e-learning, and then tells us succinctly how to get there.”

—CLARK QUINN  
*Executive Director at Quinnovation*

“Michael Allen’s books have been the fundamental reasons for me to establish an e-learning development firm in Singapore.”

—SHAMINI MANIKAM  
*Founder, TinkTank Talent Associates*

“Our industry is littered with rapidly produced content and it’s time we look back to one of our pioneers to learn where we went wrong. Dr. Allen speaks to the heart of the issues today with solutions designed to realign training to its business goals. With an unwavering focus on the science behind learning design, Dr. Allen’s latest book is essential for anyone passionate about designing training to deliver tangible results.”

—GLENN BULL  
*Founder & CEO, Skilitics*

“*Michael Allen’s Guide to e-Learning* is one of the books I consider to be essential reading for any e-learning designer. It’s full of useful design frameworks and vivid examples.”

—JULIE DIRKSEN  
*Author of Design for How People Learn*

“Michael’s use of stories and missteps to add context elevates the experience of the learners. Learning becomes memorable. In this book Michael elegantly weaves boring fact-based content with realism, emotions and motivation. Read this book and breathe new life into your courses.”

—RAY JIMENEZ, PH.D.  
*Chief Learning Architect,  
Vignettes Learning Training Magazine Network*

“I still remember the day I picked and started reading the first edition of *Michael Allen's Guide to e-Learning*. It completely changed my perspective and gave me practical ideas on creating engaging, interactive, and fun eLearning courses. Feeling the same joy reading the second edition today.”

—POOJA JAISINGH

Senior eLearning Evangelist, Adobe Systems

“There are experts, and then there are the people the experts talk to when they really want to know the truth. Michael Allen is one of those people. He was there at the start of the eLearning industry and has devoted his entire career to nurturing, shaping, growing and, sometimes, disciplining entire generations of learning professionals who seized on an approach to development that Michael helped to create. *Michael Allen's Guide to e-Learning* is a must read for anyone (ANYONE) who aspires to create meaningful, measurable and impactful e-learning.”

—LARRY ISRAELITE

“Being in the industry for many years, seeing the constant flux of change, it is refreshing to see professionals that remain adamant on certain qualities and still recognize the difference communicating ideas and concepts effectively can make in all these forces pulling the industry in every direction. As Michael recognizes, “learning begins by drawing the learner’s attention. A meaningful task challenge takes the place of traditional learning objectives”. Indeed, creativity and the ability to write content that is meaningful, motivational, and memorable at the same time, however essential skills, are not to be taken for granted. I am re-assured that we do enter the next age still with a few great professionals to hold as beacons of quality and true essence in this constant changing.”

—CHRISTOPHER PAPPAS, MBA, MED

Founder & Owner of the eLearning Industry Network

“Michael Allen, one of the ‘e-learning elite,’ has crafted a second edition that is more relevant and practical than ever. His ‘Seven Magic Keys to Motivational eLearning’ are worth the price of the book alone! This book is sure to be your go-to guide for everything ‘e.’”

—ELAINE BIECH

*Author* Training and Development for Dummies and 101 Ways  
to Make Learning Active Beyond the Classroom *Editor* ATD  
Handbook

“This is an excellent example-filled update for the novice practitioner or the experienced one wanting to catch up – and brush up.”

—DR. JANE BOZARTH

*Author of Better than Bullet Points and From Analysis to  
Evaluation eLearning Coordinator for the state of NC.*

“Michael Allen nails it. This rework of classic is itself, an instant classic. He reminds us that creating meaningful, memorable, and motivational learning experiences is hard but critically important work. He presents tangible, accessible and highly impactful guidance for anyone designing instruction and crafts a stunning defense against those who want to create instruction by ‘taking the easy way out.’ His recommendations, examples and stories are based on rich intellectual knowledge of instructional design and vast experience in the field. If you want a book that will make you a better designer of instruction there is no other book.”

—DR. KARL M. KAPP

*Professor of Instructional Technology, Bloomsburg University Author of  
The Gamification of Learning and Instruction*

“Over a decade after the first edition, Michael Allen does it again with his second edition—bringing practical, research-inspired wisdom to e-learning design. I can dive in anywhere in the book and find nugget after nugget of inspired practical insights.”

—WILL THALHEIMER, PHD

*President of Work-Learning Research, Inc*

“It would be difficult to find any important topics regarding the e-learning industry that aren’t covered in this amazing volume. It is both a primer for those new to the industry and a reminder of what really matters to anyone who is already working in this field.”

—JOE GANCI

*President, eLearningJoe, LLC*

“If you only read one book on eLearning and instructional design, let this be it. Full of updated and practical examples for today’s generation of e-learning designers, you’ll walk away inspired and more knowledgeable than before.”

—CAMMY BEAN

*VP of Learning Design at Kineo*

*Author of The Accidental Instructional Designer: Learning  
Design for the Digital Age*

“When Michael Allen talks, I want to listen! While the book covers many of the basics that a new practitioner would need, Dr. Allen also uses humor to challenge even experienced practitioners so that we don’t slip into bad habits or adopt hot trends just because they’re hot. He helps us stay the course.”

—DIANE ELKINS

*Founder, Artisan E-Learning*

“I often close my critique of a student’s work with the question ‘Are you having fun?’ I often close my email with the axiom ‘Instructional Design is Fun!’ and Michael Allen provides a way for those assigned to design e-learning to have fun creating learning experiences that will help their learners have fun as they acquire the skills being taught. As he notes e-learning has become pervasive but, as he also correctly observes, way too much of this flood of online instruction is boring, ineffective, inefficient, and expensive because it wastes the student’s time and does not accomplish the goals of the organization providing the training. Michael’s Guide to e-Learning is a very pragmatic approach that attempts to provide a simple way to design instruction that is meaningful, motivating and motivational while painlessly implementing the best that research has to say about effective, efficient and engaging instruction. This guide is a must read for everyone who is tasked to design e-learning whether trained instructional designers or designers-by-assignment. You’ll be glad you did. Keep smiling!”

—DAVID MERRILL

# **Michael Allen's Guide to e-Learning**



*In Memoriam*

*This book is dedicated to my niece  
Rev. Kelly Allen  
who was an inspiration to so many through her  
exemplary life and  
her tireless fight for the poor, discriminated, and defenseless.  
Taken from us far too soon, I know Kelly,  
an indefatigable scholar,  
would encourage all efforts to help people learn and  
develop their full potential.*

# Foreword

Meaningful. Memorable. Motivational. When was the last time you applied those three words to an e-learning course you took?

My guess is you might answer “never” or “rarely.” And that’s a problem.

It’s a problem Michael Allen masterfully tackles in the second edition of *Michael Allen’s Guide to e-Learning*.

Nearly thirteen years ago, when Michael published the first edition of this work, the case was still being built for the viability of technology-enabled learning. The debates raged about whether e-learning was actually learning, and whether people could learn via computers. Classroom was king and Michael’s work helped open eyes and minds to how technology could enable learning on a scale previously unimagined. These were the days before tablets and smartphones, before Facebook and Twitter, before MOOCs and the Khan Academy. And Michael’s resounding call about the viability of e-learning rang loud and strong. But he also challenged us to understand that the value of e-learning wasn’t about the technology—it was about designing for the technology and making e-learning something different, something powerful, and something meaningful.

Today, the conversation is a bit different. Learning via technology is pervasive. Online courses are offered to students in elementary schools, and most young people will tell you their #1 research tool is YouTube. Organizations continue to increase the use of technology to deliver learning. We know that people can and do learn via technology—and some prefer to learn that way. But e-learning still has not realized its full potential. There’s more of it, yes. But that doesn’t mean that what’s available is making enough of a difference in the lives of learners.

Michael talks about the “3Ms” (meaningful, memorable, motivational) in Chapter 5 (Executive’s Guide to Good e-Learning) and states, “What I value are meaningful, memorable, and motivational learning experiences because they have the best chance of enabling people to do what they want

and need to do.” This is a powerful statement that extends well beyond the context of e-learning. In fact, I think it is a lens through which all of us in the talent development profession can evaluate what we do and how we do it.

It’s critically important that we understand that the courses we design and deliver must be relevant to the learner. In organizations, learning’s relevance means aligning to goals and strategies that are meaningful to stakeholders *and* to employees. Some of this is about the learning experience, certainly, but there’s more to the story.

To be relevant and to create meaningful content, talent development professionals must partner with stakeholders to fully understand their needs, and *then* design courses and learning initiatives that address knowledge and performance needs, close skill gaps, and prepare pipelines of ready talent. This requires intentionality, preparation, and an investment of time—things that are often lacking because they are not valued as critical parts of the process.

We need to change how we think about what we do, why it’s important, and what it can achieve. The power of learning should not be undervalued or underestimated. Learners must do their own learning, of course, but those in the talent development profession are uniquely positioned to make that learning meaningful, memorable, and motivational. When we rise to that challenge we have the ability to affect real change and growth.

And that is Michael’s call to us. His passion for the “why” behind e-learning is evident in every page of this book. He’s brought new thinking and new insights to this second edition. He’s not only updated the content, he’s updated the context. He helps us see that just because we’re swimming in technology, doesn’t mean we’re using it well. He makes it very clear we’re not reaching our potential when it comes to e-learning.

And then he offers us a road map. As only Michael Allen can, he’s laid out examples and tactics and resources in a meaningful, memorable, and motivational way.

I encourage everyone with a passion for learning to read this book. It will inspire your work.

*Tony Bingham  
ATD President and CEO  
June 2016*

# Preface

It seems like yesterday when the first edition of *Michael Allen's Guide to e-Learning* was published. But it was actually almost 13 years ago when the first copy was delivered to my doorstep on Christmas Day, even finding me vacationing with my family on Grand Cayman Island. Talk about your publisher pulling out all the stops to deliver a present at the best time and place!

When writing the first edition, I thought about how much I learned from very early endeavors in e-learning. Each undertaking was a serious event because expensive equipment was involved, programming took a lot of time and effort, and there were many skeptics ready to point out shortcomings. Disrupting sacred traditions of teaching, introducing cold insensitive machinery, and suggesting that teachers might better use their time as a resource to students rather than as presenters were bold and radical.

Nevertheless, there were inspiring achievements in that early work, along with many demonstrations of ineffective directions, too. The future promised meaningful, memorable, and motivational learning opportunities for all—if and when the barrier of delivery costs were overcome.

Not only have delivery costs dropped to negligible levels (something we honestly couldn't have contemplated), but the capabilities of the delivery systems are now also greatly expanded to include video, animation, instantaneous searches of live data, portability, and so much more. We now have none of the barriers we previously faced to provide excellent learning opportunities to all citizens of planet Earth—and at a very low cost, if any.

But what's happened?

Well, the situation flip-flopped. In centers where instructional technology was being developed and tested, researchers developed critical know-how regarding how to use technology effectively. But today, we have legions of people who are blithely confident that their abilities to use tools

to present content and ask questions are sufficient. Instead of repeated evaluations to make certain instructional software is effective before going live on expensive delivery systems, e-learning courseware is now routinely delivered with no evaluation ever. Today, we're concerned about every minute of authoring time as opposed to the much more important volumes of hours learners spend, productively or not.

So, the mission of this book has not changed. I continue to look for simplifying methods of courseware design that can both reduce authoring time and, most importantly increase learning impact. I believe much of what I offered in the first edition remains valid, but I've gathered and share herein additional concepts and methods that are useful to my colleagues and me.

Examples are always valuable, so I've updated examples, retaining a few that seem to make some points as clear as can be and adding new ones for inspiration. Because the nature of interactive instructional designs can best be understood by describing the essential components of context, challenge, activity, and feedback (CCAF), many of the examples are presented through identification of these components.

## Second Edition Examples

Chapter	Page	Concept	Example Title
3	36	Experiences vs. presentations	Locating an Earthquake's Epicenter
10	138	Building motivation through anticipated outcomes vs. learning objectives	Expedia Travel Planning
10	150	Using risk to increase learning motivation	Sunnyside Grill
10	166	Reversing traditional "tell and test" to measuring abilities first (testing) allows subsequent instruction to be tailored to individual needs	Cooking with Flair: Preparing Fruits, Salads, and Vegetables
10	183	A compelling story and novel are combine to make an engaging context	Manhattan Associates: Supply Chain Training
10	187	Using a novel context to make learning experiences memorable	Why Does Glue Stick?

Chapter	Page	Concept	Example Title
10	193	Authentic multistep tasks engage learners more deeply and help transfer learning to performance	POST LERT First Responder
10	205	Delayed judgment is more representative of the performance feedback learners receive on the job	AutoNation: Customer Care
11	218	Allowing learners to browse and assess courseware as easily as they would a book	ZebraZapps “Sneak Peek” feature
11	227	Multifunction navigation bar provides controls and status information	NYI Medical Center: ICIS patient records
11	228	Reusable model implements all navigation imperatives	American Airlines WorldTutor
12	238	Primary components of instructional interactivity (CCAF)	Supervisor Effectiveness: Employee Security
12	244	Second example of CCAF	Railroad Safety for Professional Drivers
12	260	Varying complexity of user gestures doesn’t equate to more effective learning experiences	Deciduous and Coniferous Trees
13	268	<b>Models That Work:</b> Increased incentive to learn when available help takes more effort to access	Airline Reservations and Ticketing
13	271	<b>Models That Work:</b> Task Model	NYU Medical: Integrated Clinical Information System
13	278	<b>Models That Work:</b> Corrective Feedback Paradigm (CFP)	Who Wants to Be a Miller?
13	284	<b>Models That Work:</b> Problem-Solving Investigation	Corning Substance Abuse
13	288	<b>Models That Work:</b> Discovery learning	POST-LERT—Recognizing and Reporting
13	293	<b>Models That Work:</b> Storytelling	In Their Virtual Shoes (Washington State Coalition Against Domestic Violence)
16	349	Integrating games and learning content	Sunnyside Grill
17	361	Using extrinsic games for drills and practice	Modified Jeopardy Board

I hope you'll agree this edition digs to the roots of excellent learning experiences, identifies and clarifies the critical components, shows how to match instructional strategies to identified types of targeted outcomes, and simplifies instructional design in valid, practical ways.

I'm so grateful for the great flood of feedback from the first edition. It has inspired me in countless ways, and I've learned so much from readers and their feedback. Please, do let me hear from you!

*Michael Allen*  
*February 2016*

# Acknowledgments

I am very much indebted to the many people who have cheerfully assisted in the production of this book and to those who inspired it by so enthusiastically sharing with me their experiences with the first edition—my first published book. What fun it has been to autograph copies and pose in selfies with my readers.

My appreciation goes to those who have educated, hired, and inspired me, those who have set the example of sharing objective evaluations and opinions of alternative approaches to e-learning, my employees who strive daily to design and produce the best learning experiences possible within given constraints, and my friends and family—without whose support there would be no second edition.

As in the first edition, the examples shown offer real, functional e-learning applications. There are no abstract mockups here. I am so proud to be able to share that first collection of work, not only because they are such fine accomplishments, but also because those who commissioned them are proud of them—and proud enough to share them publicly. This time around, I had many more candidate examples than I had space for. It was hard to choose. With our studios producing countless works for the most prestigious and demanding corporations, and achieving more awards than we can possibly display at one time, the library of examples has grown to immense proportions.

Steve Lee was invaluable in his assistance sorting through projects, recommending examples, and annotating their notable characteristics, just as Ethan Edwards was for the prior collection, some of which were retained because they so perfectly illustrate key concepts. Helpful editorial feedback came from Ellen Burns and Michelle Kenoyer.

My assistants, Sarah Bertram and Jose Benitez, worked tirelessly with document management, formatting, communicating, coordinating, and so much more. Try as I would to confuse things, they kept sorting things out and calming my hysterics.



Linda Rening, a talented writer, experienced editor, and the nicest, warmest person you'll ever meet, volunteered to edit my ramblings while also giving me helpful feedback on content. Her sharp and creative eye is responsible for whatever appeals to you in this text; the rest of it is my doing.

Chris Palm and Joslyn Schmitt did a fantastic job of providing a more modern aesthetic to the book through a redesign of old graphics and creation of new ones. They have tremendous talent, are spectacularly fast, and are really fun to work with. Thank you to Scott Colehour and Pete Lisowski for their efforts to produce a presentable cover photo.

I couldn't be more grateful to Tony Bingham for his encouragement of this work and ATD's promotion of the concepts through workshops, webinars, and bookstore events. Please note Tony's foreword herein. We're all so lucky to have his leadership in our industry. Special thanks also to Glenn Bull and editors@thenewid.com for their permission to use their great comic strips. It's important to keep good humor as we tackle the many diverse opinions on what makes good instruction and how to create it.

Special thanks to Martin Lipshutz, my business partner and a confident and steady rudder who keeps Allen Interactions functioning smoothly and efficiently while I devote so much time to works like this. And my hat goes off to all the others who somehow manage to devote the time and effort it takes to publish works of guidance on e-learning. I know how much time and energy it takes and the sacrifices involved, but I always learn so much when reading your publications, and I always try to integrate the contemporary thinking, knowledge, and experience of others into my work.

Again, my wife and family do so much to accommodate my mental fugues and sojourns, which happen so unpredictably. I always come back, and without having to ask "What did I miss?" I can count on an empathetic account to catch me up. They are the biggest supporters of my happiness and goals.

Thank you all.