

## Sample Chapter Hello from Will Thalheimer!

Hello, this is Will Thalheimer, author of *Performance-Focused Learner Surveys*, now in its second edition. I thought some of you would like to get a taste of the book before you buy, so I've copied the first several sections and put them in this document. I've added the book index (so you can see the specifics of what's in the book) and I've added the "About the Author" section as well, because I've been told by a tiny homunculus, that everyone wants to learn more about me. SMILE.

The book is 7x10 inches, but I've transformed it into 8.5x11 inches in this document, so the pagination won't be the same as the actual book.

Enjoy!

A handwritten signature in black ink that reads "Will Thalheimer". The signature is stylized and cursive, with a long horizontal flourish at the end.

Will Thalheimer  
Principal  
TiER1 Performance

Owner  
Work-Learning Press

# Advance Praise

## For

# Performance-Focused Learner Surveys

Given heavy reliance on surveys to plan and evaluate training programs, an evidence-based approach to construction and interpretation of surveys is way overdue. Kudos to Will Thalheimer for leading the way!

*Ruth Colvin Clark*  
*Legendary Learning Researcher & Consultant*

It's about time that someone took the ubiquitous but mostly useless end-of-session training feedback questionnaire to task. Will Thalheimer does a great job of telling us why the current practice doesn't work and replaces it with thoughtful and sensible advice for feedback tools that will provide valid and actionable data.

*Robert O. Brinkerhoff*  
*Professor Emeritus, Western Michigan University*  
*& Director, Brinkerhoff Evaluation Institute*

In our field there can be a lot of hand-waving—general advice without clear application guidelines. Will's book is exactly the opposite. He gives you the deep-dive on training evaluations, including both the how and the why. This is evidence-based practice at the master level.

*Julie Dirksen*  
*Author of Design For How People Learn*

Will Thalheimer attacks one of the most intractable misconceptions in our field, and does so with authority and humor. His straight-shooter approach to improving learner surveys is a wake-up call for the field. Thalheimer's prescription is easily understandable and makes perfect sense. And, any book that equates learning measurement to pure sex has to be a must read!

*Marc J. Rosenberg, PhD  
Marc Rosenberg and Associates*

In the second edition of his paradigm-busting book, *Performance-Focused Learner Surveys*, Will Thalheimer continues his quest to help learning professionals make training evaluation more valuable—not just for proving training's value, but as decision support for continuous improvement.

*Roy Pollock, DVM, PhD  
Chief Learning Officer, 6Ds® Company  
Co-author of Six Disciplines of Breakthrough Learning*

Will Thalheimer, one of our most reputable translators of research into practice, has rewritten his readable treatise on that scourge of learning, smile sheets. The insightful (and inciteful) work that aptly skewered current approaches now provides an even more valuable alternative that both helps us now and educates us to do better going forward. A valuable contribution indeed!

*Dr. Clark Quinn  
Executive Director of Quinnovation  
Author of Learning Science for Instructional Designers*

With this book, Will Thalheimer provides an important contribution, particularly in showing how to ensure that learner feedback provides a true gauge of on-the-job success. The book is research-based, comprehensive, and based on real world experiences. If you're spending time and money in using learner surveys, this book will show you how to make them valuable, useful, and relevant to your organization's success.

*Jack J. Phillips  
Chairman, ROI Institute*

Freakin' revolutionary or business smart? Will Thalheimer's position is that learner surveys are a waste unless they're designed to predict a change in job behavior—an idea that's refreshing, worthwhile, and, as the book demonstrates, actionable too! I encourage you to read *Performance-Focused Learner Surveys* and reflect on how you might improve the feedback your organization captures from its learners.

*Judith Hale, PhD, CPT, ID (SEL, ILT, JA+)  
Co-founder Institute for Performance Improvement*

Will Thalheimer's work is grounded in research, honed through experience, and organized to provide a practical perspective for application. In *Performance-Focused Learner Surveys* Will dissects the current failure of learner-feedback instruments and provides an alternative perspective on what will work; as well as arguments you can use to change organizational cultures that remain wedded to these inaccurate metrics.

*William Coscarelli  
Professor Emeritus,  
Southern Illinois University*

Will Thalheimer, PhD, is one of the definitive myth busters in our field, and he does it with great precision but also humor. It's good that he's explaining the things we need to know about learner surveys, because there are just too many fairytales. We must be held to a higher standard.

*Patti Shank, PhD  
Author and Learning Analyst  
PattiShank.com*

Only a few people combine the rigor of a researcher and the usability of a how-to writer. Will Thalheimer is the best among them. He has done it again in his Performance-Focused Learner Surveys. The second edition is a superior version. Will has undertaken an audacious project. This book is the beginning of a radical revolution for professionalizing our field. Sign me up.

*Sivasailam Thiagarajan, PhD  
Principal and "Mad Scientist"  
at The Thiagi Group*

It is hard to do, but Will Thalheimer has found a way to make the measurement of learning sexy and exciting in his book Performance-Focused Learner Surveys. You'll find yourself turning the pages and laughing along the way (usually at your own past mistakes, which you won't make again after reading this book).

*Ryan Watkins  
George Washington University*

Finally, a book that acknowledges and addresses the dirty and widespread problem with smile sheets, which typically tell us nothing useful and focus our attention on the wrong things. Will Thalheimer's book provides useful guidance for using this tool correctly, in ways that improve learning and its transfer to the workplace in ways that produce valued performance. Anyone involved in workplace learning and performance will find this book valuable.

*Steven W. Villachica, PhD  
Associate Professor  
Boise State University*

Just when I thought it couldn't get any better, this updated version takes the whole concept up a notch (or two) so, if you are responsible for evaluating training, stop right now and read "Performance-Focused Learner Surveys". The insights and ideas will change forever how you create evaluations. Quite simply, the BEST book on learner survey creation and utilization (even better than the first edition), Period!

*Karl M. Kapp  
Professor of Instructional Technology  
Bloomsburg University*

What I like most about Thalheimer's updated book on Performance-Focused Learner Surveys is that it still puts the focus where it belongs, on predicting subsequent performance back on the job—the ultimate measure of learning in an enterprise context. This is an excellent guide with many example survey questions for adopting or adapting to nudge the reader to generate better actionable data!

*Guy W. Wallace  
Performance Analyst &  
Instructional Architect, EPPIC Inc.*

Thalheimer has replaced the smile sheet beauty pageant with an approach that delivers concretely actionable design insights, reinforces learning, and educates learners and their sponsors about what really matters in learning. He's turned learner surveys into a tool capable of delivering substantial performance impact for both individuals and businesses.

*Adam Neaman, PhD  
Vice President, Learning & Development  
The D. E. Shaw Group*

Armed with a lot of heart and incredible insights, this book oozes with mind blowing, radical, myth-busting, research-proven takeaways from the master of learning research, Will Thalheimer. This is a must read, and must apply, for anyone involved in education, learning and evaluation from conferences to workshops to online education.

*Jeff Hurt, Chief Epiphany Officer,  
Empowered Epiphanies*

A must have resource for all L&D professionals who want to lift their game with learner surveys - and in turn, learning effectiveness and transfer. Full of practical guidance, sample questions and rationale. Will makes sure you know what to do (and not do!) and why. An easy and quick guide to radically overhaul this critical component of learning evaluation.

*Michelle Ockers  
Learning Strategy, Learning Uncut*

The familiar four-level taxonomy used for assessing the value of training is fraught with problems; the first level, “smile sheet” reactions from learners, is especially noted as mostly a timewaster. Thalheimer has developed an approach to making this phase of evaluation more worthwhile, as a valuable means of correlating effort with learning, and better informing ways of improving our work. This new edition has several additions, bringing new help for problems that bedevil many of us in the business: asking better questions, getting better feedback, and upping response rates.

*Jane Bozarth*  
*Director of Research, The Learning Guild*

Let me start with a disclaimer: I am a Will Thalheimer fan. Will's ability to translate scientific research in a way that practitioners can easily apply it in practice is next to impossible to beat. This new book is just one example of his fantastic work. I own the 2016 version of this book and have used it ever since. This 2022 version adds many gems. For example, it shows how learner surveys can be used to nudge—showing training intent or implicitly calling to action. It also includes many new and useful examples (they make it so much easier to redesign your surveys), and a chapter on motivating learners how to respond (data equals power, after all!). Every L&D department needs this book!

*Mirjam Neelen*  
*Author of Evidence-Informed Learning Design*

PERFORMANCE-FOCUSED  
LEARNER SURVEYS

# PERFORMANCE-FOCUSED LEARNER SURVEYS

Using Distinctive Questioning to Get Actionable  
Data and Guide Learning Effectiveness

SECOND EDITION

Will Thalheimer, PhD, MBA

Work-Learning Press  
SOMERVILLE, MASSACHUSETTS

Copyright © 2022 Will Thalheimer

All rights reserved. No part of this publication may be reproduced, distributed or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other non-commercial uses permitted by copyright law.

Work-Learning Press  
[www.worklearning.com](http://www.worklearning.com)

Performance-Focused Learner Surveys / Will Thalheimer. — 2<sup>nd</sup> Edition

ISBN: 978-1-941577-03-5 (paperback)

ISBN: 978-1-941577-05-9 (hardcover)

ISBN: 978-1-941577-04-2 (ebook)

Library of Congress Control Number: 2022932111

# Dedication

For many, many years, I've had the following dedication written down, waiting for my first book to be published. I want to use this chance to honor those who have given me the most.

- To my mom and dad, Kay and Bill, who somehow—in a way that I regret I'll never fully understand—prepared the soil for my growth and learning.
- To my wife, Dorothy, who has allowed me my mission—through the struggle, despair, and joys of the journey.
- To my daughter, Alena, whose young adult explorations and thoughtful skepticism of convention, remind me daily that learning is at the heart of our humanity.

*Let us measure what is important to measure,  
not just what is easy to measure.*

*Let us measure to gain insight,  
to motivate action,  
to enable success.*

*Will Thalheimer*

# Contents

PREFACE .....	VII
WHAT'S NEW IN THE SECOND EDITION.....	IX
WHY THIS BOOK IS WORTH YOUR TIME.....	XI
WHO WILL FIND VALUE IN THIS BOOK.....	XIII
ACKNOWLEDGMENTS.....	XV
INTRODUCTION.....	XVII
CHAPTER 1 WHY LEARNER SURVEYS?.....	1
CHAPTER 2 YOUR SMILE SHEETS SUCK!.....	11
CHAPTER 3 MEASURING EFFECTIVENESS.....	29
CHAPTER 4 PRODUCING ACTIONABLE RESULTS.....	45
CHAPTER 5 SENDING MESSAGES TO NUDGE ACTION.....	55
CHAPTER 6 LEARNER-SURVEY QUESTION QUIZ.....	65
CHAPTER 7 CANDIDATE QUESTIONS.....	79
CHAPTER 8 SPECIAL PURPOSE QUESTIONS.....	131
CHAPTER 9 COMMENT QUESTIONS.....	175
CHAPTER 10 TAILORING YOUR QUESTIONS.....	181
CHAPTER 11 FOLLOW-UP LEARNER SURVEYS.....	189
CHAPTER 12 MOTIVATING LEARNERS TO RESPOND.....	201
CHAPTER 13 PRESENTING LEARNER-SURVEY RESULTS.....	215
CHAPTER 14 MAKING IT HAPPEN.....	229
CHAPTER 15 MEASURING LEARNER PERCEPTIONS IN OTHER WAYS.....	237
CHAPTER 16 ITEM: THE BIG PICTURE OF LEARNING EVALUATION.....	243
EPILOGUE.....	249
WHERE DO WE GO FROM HERE?.....	249
REFERENCES... RESEARCH INSPIRATION.....	253
ABOUT THE AUTHOR... WILL THALHEIMER, PHD, MBA.....	259
INDEX.....	261

## Preface

I've been doing learning since I reached adulthood. I taught emotionally disturbed kids how to act as Boy Scouts. I taught a young woman whose body and mind had been devastated by meningitis—who had almost no control over her arms—how to reach to grab a spoon. It took six weeks. I got into an MBA program so I could find a job, but found that instructional-design courses were much more rewarding. I got work as an instructional designer and designed an “MBA in a box.” I built simulations to teach leadership and management skills. I parlayed this into an opportunity to build two simulations to teach at-risk high-school students in Brooklyn about how to run a business. I taught teachers-in-training about educational psychology. They taught me that I knew nothing about schools. I taught leadership courses and change-management courses to managers in Fortune 500 companies. I even taught business strategy a few times with learners polite enough not to laugh at my lack of depth. For twenty-three years, I've been teaching instructional designers, trainers, and elearning developers about the research on learning.

I was lucky. When I started Work-Learning Research in 1998 I had very few responsibilities. No family to help support. No mortgage to pay. I could earn enough money to support myself by selling my skills as a leadership trainer. Most of my time was spent wonderfully lost in the research on learning, memory, and instruction. My aim was to uncover a short list of fundamental learning factors in an otherwise chaotic sea of experimental results. The task was huge—too big for me to succeed in the short term. But, swimming in the vast depths of the research, I began to understand human learning at a deeper level than I could have previously contemplated. I also learned how daunting the task, how impossible! Over the years, I've kept my research going a good portion of the time. It's an important task—bridging the gap between research and practice; but, unfortunately, it's one that the world doesn't easily support in the learning field. Still, I'm grateful I've had the time.

I took this path because I believed strongly—and still believe—that learning is a noble cause. It is learning that has enabled human civilization and growth. It is learning that enables individuals to excel and thrive. It is learning that holds the promise of the future.

If learning is so important and our task is such a noble one, don't we, as learning professionals, have an almost sacred responsibility to do our jobs well?

The way I see it, there are two lynchpins to our performance. First, scientific research must guide our starting assumptions. Second, we must use good learning measurement to get valid feedback so we can refine our understandings, improve our learning designs, and live up to our promise—so we can maximize learning’s benefits.

This book focuses on the second imperative. It examines the popular (yet down-trodden) learner survey and attempts to elevate it to full effectiveness. While learner surveys should never be the only way we get feedback on learning, by improving them, we can get significantly better information about how we’re doing. With better information, we can create virtuous cycles of continuous improvement. We can build more effective learning interventions and meet our obligations as learning professionals.

## What's New in the Second Edition

I finished writing the first edition in 2015, published it in 2016, and, since then, I have helped hundreds of organizations build radically improved learner surveys. I have learned a huge amount along the way and have improved my learner-survey methodologies. Also, since then, I've continued my study of learning evaluation. Doing a rough facsimile of investigative journalism, I found out that Donald Kirkpatrick was NOT the originator of the Four-Level Model of learning evaluation—Raymond Katzell was. I built—with the help of others—a new learning-evaluation model to replace the Kirkpatrick-Katzell Four-Level Model. The new evaluation model is LTEM, the Learning-Transfer Evaluation Model. It is pronounced “L-tem.” It has begun to transform learning evaluation and the whole infrastructure of learning and development in organizations throughout the world.

I've also begun to envision learning evaluation in a radically new way. The premise of the new way is simple—and obvious once it is stated out loud. We in the learning field have missed it completely, however—our thinking handcuffed, and our vision diminished by the Four-Level Model. I call the new approach *LEADS* (pronounced “Leeds”): Learning Evaluation As Decision Support. I will talk more about this in my forthcoming book, *The CEO's Guide to Training, eLearning & Work: Reshaping Learning into a Competitive Advantage*.

In this second edition, though, there is not enough time to delve deeply into LTEM and LEADS. However, their DNA is integrated throughout, and I include a chapter on LTEM as a brief introduction.

The following specific updates have been made in this second edition:

1. The book is retitled: Performance-Focused Learner Surveys. The term “learner survey” replaces “smile sheet” because it is more descriptive. Also, “learner survey” is less freighted with derision.
2. The subtitle has changed: *Using Distinctive Questioning to Get Actionable Data and Guide Learning Effectiveness*. The new subtitle is more descriptive, helping people find the book.
3. After years of nudging from readers, I’ve coined a term for the unique question methodology recommended in this book. *Distinctive Questioning*.
4. I’ve improved the wording and design of many of the questions presented in the original book. I have been working with organizations to build improved learner surveys for over six years and I’ve learned a ton through pilot testing and feedback. I’ve also continued to study survey design and learning and have incorporated new wisdom I’ve picked up along the way.
5. I added a new chapter with more than a dozen special-purpose survey questions. Altogether, this second edition has about twice as many candidate questions as the first edition.
6. I added a new chapter on how to use open-ended questions.
7. I added a new chapter introducing LTEM.
8. I added a new chapter on how to tailor questions to make them more engaging, more relevant, and more powerful.
9. I added a new chapter on how to get higher response rates from our surveys—whether they are online or in the classroom.
10. I added a new chapter on other ways to get feedback from learners.
11. I included insights and lessons learned from people who have used performance-focused learner survey approaches in their organizations.
12. I’ve reconceptualized the benefits of learner surveys, and now offer a list of twenty benefits rather than the original nine from the first edition.

# Why this Book is Worth Your Time

1. The methods presented in this book will help you create learner surveys that provide you and your stakeholders with truly valuable data and information—of the kind that enable you to create virtuous cycles of continuous improvement and, thus, significantly improve learning outcomes for your learners and your organization.
2. This book is research-based. It draws its recommendations from the world’s best learning research from the preeminent refereed scientific journals on learning, memory, and instruction.
3. This book is comprehensive. It offers a complete system for developing learner surveys.
4. This book is born of real-world experience. It acknowledges that research alone is not worth anything without practical wisdom.
5. This book is designed to help you learn. It will support your learning as much as the book format allows.
6. This book is a “call to arms.” It takes an honest look at the learning-and-development field and our poor measurement practices. It celebrates sound ideas. It fumes angrily at bad practices.
7. This book follows the aphorism often attributed to Albert Einstein, “Everything should be made as simple as possible, but no simpler.”<sup>1</sup> It simplifies complex realities into workable recommendations.

---

<sup>1</sup> Ironically, these words were probably not actually stated by Einstein, but are rather a simplification of the sentence, “It can scarcely be denied that the supreme goal of all theory is to make the irreducible basic elements as simple and as few as possible without having to surrender the adequate representation of a single datum of experience,” as described at <https://quoteinvestigator.com/2011/05/13/einstein-simple/>.

## Who Will Find Value in This Book

This book will benefit workplace-learning professionals who want to improve the design and delivery of their learning interventions.

1. **Learning measurement professionals**—practitioners responsible for learner surveys, assessments of learning and performance, and learning-based organizational results.
2. **Creators of learning interventions**—instructional designers, trainers, elearning developers, teachers, professors, and other educators.
3. **Managers of learning**—chief learning officers, learning executives, training managers, conference-education professionals, and instructional-development managers.
4. **Graduate students and faculty**—in learning measurement, assessment, instructional design, instructional technology, elearning, performance improvement, and adult learning.

Performance-Focused Learner Surveys is ideal for experienced practitioners who want to (1) energize their current practices with research-based recommendations, (2) challenge themselves with unique and provocative perspectives, and (3) prepare for the future of the learning-and-performance field.

# Acknowledgments

## *First Edition:*

Books don't get written or published by themselves. I am grateful to my wife, Dorothy, and my daughter, Alena, who have allowed me time to write and think. I am indebted to thousands of research scientists, journal editors and publishers, libraries, and database creators for enabling me to learn from the research. I am thankful to my clients who have made it possible over the past seventeen years for me to make a living and continue my work.

Specific thanks go to Doug Holt and Russ Spaulding for enabling me to share some of the underlying concepts of Performance-Focused Learner Surveys before they were fully formed. Thanks to all the folks who gave me advice on book publishing, including Mark Klein, Chad Udell, Clark Quinn, Julie Dirksen, Michael Allen, Ruth Clark, Allison Rossett, Roy Pollock, and various members of the Maine Writers and Publishers Alliance.

Thanks to Kate Ankofski and Katherine Pickett for their incredibly helpful editing. I had no idea that so many improvements could be made.

Special thanks go to Jack Phillips, Rob Brinkerhoff, Bill Coscarelli, Clark Quinn, Adam Neaman, and Julie Dirksen, for giving me in-depth feedback on the initial draft of this book—helping me improve it immeasurably.

***Second Edition:***

Thanks go out to my wife and daughter again for their forbearance, especially when my consulting practice hit hard times.

Thanks to those in the learning-and-development industry who have seen the transformative value of the ideas in this book, who have advocated for these ideas, and who have supported my work. I am truly grateful!

Thanks to Ross Edwards (FreelanceScribe.com) for providing expert copyediting.

Thanks to my research-to-practice family who have been a source of inspiration and comfort throughout the years: Ruth Clark, Patti Shank, Clark Quinn, Julie Dirksen, Mirjam Neelen, Guy Wallace, Jane Bozarth, and Karl Kapp. Thanks to Matt Richter for our many efforts at supporting the learning-and-development community, including the Truth In Learning Podcast, the Learning Development Conference, and the Learning Development Accelerator professional community and for encouraging me to keep at it when times were difficult. Thanks to Patti Shank for encouraging me to publish in a different way, a faster way, a way with less friction! Thanks to my TiER1 colleagues who thrill me every day with their compassion and commitment to helping people do their best work.

# Introduction

For over two decades I've exhaustively reviewed research on how people learn—reading an average of more than two hundred articles every year from scientific refereed journals. Doing the research enabled me to build a consulting practice where I could provide workplace learning professionals with research-inspired insights. It has also compelled me—and I really can't help myself—to think about the state of the learning profession. This is not always a happy endeavor.

One thing I noticed a few years ago was that we, as workplace-learning professionals, often work in darkness. We get most of our feedback from learner surveys—also known as smile sheets, happy sheets, postcourse evaluations, student-response forms, training-reaction surveys, and so on. We also get feedback from knowledge tests. Unfortunately, both learner surveys and knowledge tests are often flawed in their execution, providing dangerously misleading information. Yet, without valid feedback, it is impossible for us to know how successful our learning designs have been. I've written this book to help you get better feedback and to help your organization produce more effective learning initiatives. I focus here on learner surveys because they are so central to our work in today's workplace-learning industry.

We, as workplace learning-and-performance professionals, often see learner surveys as a small thing when they are, in fact, a huge, dark, and demonic colossus. More than any other tool in the training-and-development industry, learner surveys control what we do. They are a self-inflicted form of mind control, warping our thoughts from learning's essential realities. Learner surveys—as typically designed—do not just tell us nothing. They tell us worse than nothing. They focus our worries toward the wrong things. They make us think our learning interventions are more effective than they are. More than any other practice in our field, they have done the most damage.

In brief, here are the problems with traditional smile sheets:

1. They are not correlated with learning results.
2. They don't tell us whether our learning interventions are good or bad.
3. They misinform us about what improvements should be made.
4. They don't enable meaningful feedback loops.
5. They don't support learner-survey decision-making.
6. They don't help stakeholders understand learner-survey results.
7. They don't educate stakeholders about important learning truths.
8. They provide misleading information.
9. They hurt our organizations by not enabling cycles of continuous improvement.
10. They create a culture of dishonest deliberation.

This book aims to stop the bleeding.

My hope for this book is simple: to help you get significantly better insight into the factors that drive your learning results—so you can improve your current learning practices. By reading this book, you will learn how to create performance-focused learner surveys using the Distinctive Questioning approach. You will look at your current learner surveys in a whole new light—as if seeing them for the first time. With newfound wisdom, you'll know how to radically improve your learner surveys, providing you and your stakeholders with a unique and enlightening vision of your learning outcomes! The learner surveys you will build will be inspired by the learning research, will help your learners produce more useful information, and will focus not just on the learning event but also on the situations and factors that enable the learning to culminate in successful real-world accomplishments.

# Chapter 1

## Why Learner Surveys?

Imagine yourself as the chief learning officer of a global corporation. You've been with the company seven years, working your way up, reveling in the success of the workplace learning-and-performance function. Suddenly, your CEO retires and a new CEO, Julie Sendirk, is hired. Julie is known as an innovator and a straight shooter. After a month or so and several meetings, Julie calls you into her office and asks you to help her understand the annual report your department created.

Julie: "Hey, welcome! Here's what I'm interested in, and I need your help. In general, I want to understand how you learning folks operate. Today, I want to drill down on the learner-survey results from the past year. If I read this report right, it says that, overall, our training courses have an average rating of about 4.1? Is that accurate?"

You: "Yes, and 82% of our courses are rated at 4.5 or better. We're very proud of our results. We've worked hard to improve our ratings over the past three years."

Julie: "But what does a 4.1 actually mean?"

You: "It means that we're doing well, that the training is well received. It's a 4.1 on a 1-to-5 scale, so we can't get much higher."

Julie: "But what does the 4.1 actually mean?"

You: [controlling the urge to talk louder] "Well, at the end of every training class, we give learners a set of questions about their perceptions of the training."

Julie: "And each question has a 1-5 scale?"

You: "No, actually. Each question is really a statement, and the learners select one of five answer choices, from 'strongly disagree,' which gets a 1, to 'strongly agree,' which gets a 5."

## Performance-Focused Learner Surveys

Julie: “So a 4.1 means that most people ‘agree,’ and, if they don’t select ‘agree,’ they likely selected ‘strongly agree,’ and, if not, then they’ve probably chosen ‘neither agree nor disagree?’”

You: “Yes, that’s exactly right. Pretty simple, really.”

Julie: “Hmm. But what does a 4.1 mean? It certainly can’t mean that our employees tend to be agreeable?”

You: “Well, no. . . .”

Julie: [cutting you off] “So the 4.1 is an average of the dozen or so questions you ask?”

You: “Well, no; in the annual report we just share the results of one question, our main question.”

Julie: [now looking skeptical] “So you collect more than 10 times the data than you share with senior management?”

You: [starting to sweat] “Well, in our experience—and let me apologize for saying this—most senior managers just want the overall scores.”

Julie: “So what is this overarching question you ask, your main question as you call it—the one that answers the question I asked earlier, ‘What does 4.1 mean?’”

You: “We ask the learners to rate the overall value of the course. The question statement reads, ‘This training provided valuable job-relevant information that supports on-the-job performance.’”

Julie: “Hmm. And what evidence do you have that the learners are good at evaluating the value of training? What evidence do you have that your main question is associated with actual on-the-job performance?”

You: “It’s a learning-industry standard.”

Julie: “And this standard is based on trusted scientific research?”

You: “Well, I haven’t actually seen the research, but I’m sure the learning-measurement experts rely on the best research.”

- Julie: “Have we done any studies to show that this one question is valid with our learners and the content areas in our organization? So, for example, if we get high scores on this question, do we know whether our employees are more likely to be successful on the job than if they’ve been in a course that gets a low rating?”
- You: “We’ve seen that this question is correlated to our other smile-sheet questions, so we’re pretty confident.”
- Julie: “But that’s not what I’m asking. Of course, the questions are correlated—probably because people just circle the same numbers down the smile sheet. What I want to know is whether our smile-sheet results—the ones you show management every year—are related to on-the-job performance. Do we know that?”
- You: “They should be.” [Here you go into a long discussion of the Kirkpatrick-Katzell Four-Level Model of training evaluation.]
- Julie: “Has this model been tested? Does it show that learner surveys are correlated with learning results? And, even if it has been tested generally, how do we know our learner surveys are correlated with our learning results?”
- You: “The Kirkpatrick Model has been around since the 1960s.”
- Julie: [acting highly skeptical] “All right! Thank you! Here’s what I want. I want a way to measure how effective our training courses are in helping our employees understand the concepts and skills they’re being taught. I also want to know whether our employees are able to remember the concepts and skills and whether they’re successful in applying them to their jobs.”
- You: “We can do that, but it costs more money to measure learning and application. We occasionally do some of this kind of measurement, but most previous senior leaders didn’t want to pay for it.”
- Julie: “Make a business case, and I’ll definitely pay for it. I don’t know how you guys can operate in the dark, without getting any feedback on how you’re really doing. But what about these learner surveys? Can’t you improve them to at least give you some idea of how effective the training has been?”

## Performance-Focused Learner Surveys

Okay, this is Will again. Let me apologize for putting you into the role of an almost-clueless chief learning officer. Just like I tell my daughter, you'll thank me for it later. SMILE. The truth is that Julie, our savvy new CEO, asked some damn good questions—questions we in the learning-and-development field don't always ask ourselves. I'm starting the book with this example to show how our traditional approach to learner surveys may have a few chinks in its armor—and also to get your blood flowing a bit. We'll go into more depth about the issues this case presents but, first, let me cover some basics to make sure we're on the same page.

### What Is a Learner Survey?

A learner survey is a set of questions provided to learners after a learning event—or after a portion of a learning event—asking for learners' perceptions of the value of the learning experience. I use the words “learning event” and “learning experience” to signal that learner surveys can be used for training, education, elearning, self-directed learning, peer learning, coaching, mentoring, learning from reading books, watching movies, going to church—any type of learning event!

Learner surveys are also known as smile sheets, smiley sheets, happy sheets, student-response forms, trainee reaction surveys, and so forth. In fact, the terms “smile sheet,” “smiley sheet,” and “happy sheet” are often considered to have a derogatory connotation. The feeling among many practitioners is that learner surveys have minimal value or provide misleading results. Despite these concerns, learner surveys are the most popular way to get evaluative feedback about the success of workplace training—and the same is true in higher education as well.<sup>2</sup>

Learner surveys are often placed within a framework of other learning-measurement methods. By far the most popular of these frameworks is the Kirkpatrick-Katzell Four-Level Model of learning evaluation. It has traditionally been called the Kirkpatrick Model, but I've renamed it here and elsewhere as the “Kirkpatrick-Katzell Four-Level Model” because, while Donald Kirkpatrick popularized it and brought the four-level idea to light, Donald Kirkpatrick himself attributed the four levels to Raymond Katzell, a highly-honored industrial-organizational psychologist.

---

<sup>2</sup> In some recent research I conducted with Jane Bozarth and the Learning Guild (Thalheimer, 2019), we found that learning professionals reported that attendance and completion rates were slightly more popular than learner surveys. Still, because most of us don't see attendance or completion as related to learning outcomes, it seems fair to say that learner surveys are by far the most popular method used to validate learning success.

The four levels are:

1. Learner Reaction
2. Learning Results
3. On-the-job Behavioral Results
4. Organizational Results

Learners' reactions are almost always measured through learner surveys. Learning can be measured in many ways, including tests, skill demonstrations, scenario questions, and more. On-the-job behavioral results are often measured with self-report data, but can be measured through observations of actual performance, ratings from others, and objective performance measures such as time-on-task completion. Organizational results are usually measured with organizational data that is already collected by the organization, such as sales revenue, costs, and customer satisfaction. While the Kirkpatrick-Katzell Model is widely used, it is also widely criticized for its shortcomings. We will touch on these shortcomings in Chapter 2. In Chapter 16 I'll introduce you to a new learning-evaluation framework that is a significant upgrade over the Kirkpatrick-Katzell Model. The new framework is called LTEM, pronounced "L-tem." For now, it's critical to understand that, for many people, the Four-Level Model signifies that learner surveys are related to the other four levels.

Learner surveys can be utilized for many reasons.<sup>3</sup> In the first edition of the book, I presented a list of nine reasons, which I'd modified slightly from learning-measurement expert Rob Brinkerhoff. In this second edition, I'm providing a twenty-item list and I've divided the list into conceptual categories to highlight key ideas:

### ***Supporting Learning Design Effectiveness***

1. Red-flagging training programs that are not sufficiently effective.
2. Gathering ideas for ongoing updates and revisions of learning programs.
3. Judging the strengths, weaknesses, and viability of program updates and pilots.
4. Providing learning architects and trainers with feedback to aid their development.
5. Judging the competence of learning architects and trainers.
6. Judging the contributions to learning made by people outside of the learning team.
7. Assessing the contributions of learning supports and organizational practices.

---

<sup>3</sup> Special thanks to Rob Brinkerhoff for reminding me of this truth.

### *Supporting Learners in Learning and Application*

8. Helping learners reflect on and reinforce what they have learned.
9. Helping learners determine what (if anything) they plan to do with their learning.
10. Nudging learners to greater efforts in learning and application.

### *Nudging Action Through Stealth Messaging*

11. Guiding learning architects to create more effective learning by sharing survey questions with them prior to the design phase and sharing survey results after data is gathered.
12. Guiding trainers to more effectively facilitate learning by sharing survey questions with them before their training preparations and sharing survey results after data is gathered.
13. Guiding organizational stakeholders to support learning efforts more effectively by sharing survey questions and survey results.
14. Guiding organizational decision makers to better appreciate the complexity and depth of learning and development—helping the learning team gain credibility and autonomy.<sup>4</sup>

### *Supporting Relationships with Learners and Other Key Stakeholders*

15. Capturing learner satisfaction data to understand—and make decisions that relate to—the reputation of the learning intervention and/or the instructors.
16. Upholding the spirit of common courtesy by giving learners a chance for feedback.
17. Enabling learner frustrations to be vented—to limit damage from negative back-channel communications.

### *Maintaining Organizational Credibility*

18. Engaging in visibly credible efforts to assess learning effectiveness.
19. Engaging in visibly credible efforts to utilize data to improve effectiveness.
20. Reporting out data to demonstrate learning effectiveness.

---

<sup>4</sup>I was going to use the word “power” instead of “autonomy” but, sadly, we learning professionals don’t seem confident enough to make “power” seem like a reasonable request. We will get there! Autonomy helps us do what we know we should do—work to maximize learning effectiveness. But power gives us more of what we need to be fully effective—resources and stakeholder inclination toward obligatory support.

Traditional smile sheets were pretty good at supporting relationships with learners and other stakeholders (numbers 15, 16, and 17 above)—getting learner satisfaction data, providing a feedback mechanism out of common courtesy, and enabling learners to vent their frustrations. Smile sheets have also played a role in helping the learning team maintain organizational credibility (numbers 18, 19, and 20). But just doing these few things is simply not good enough! Especially now when we know how to do better.

I'm on my high horse in this book to help us realize the full promise of learner surveys. We should develop better feedback loops so we can create virtuous cycles of continuous improvement. We should better support our learners in learning and application. We should do a better job in utilizing our learning evaluation practices to educate our stakeholders and get their help in supporting learning and development.

That's my hope, but you and your organization are going to have to determine for yourselves what you want to get out of your learner surveys. Indeed, one key to successful evaluation is to first figure out why you're doing what you're doing. I recommend you get your team together to reflect on the above twenty-item list and see what you want to accomplish with your learner surveys. Only then should you start your learner-survey design work.

Let me add one more note about terminology. You might have noticed that I'm using two terms almost as synonyms: "smile sheets" and "learner surveys." In this second edition of the book, I will use the term "smile sheet" to refer to *poorly designed* learner surveys. I will use the term "learner survey" as a general term, encompassing both the good and the bad.

### **Learning Measurement Is Pure Sex!**

I received a call, as I wrote the first edition of the book, asking me to speak at an industry meeting. The caller said she loved my work and anything I wanted to talk about would be great. Because of all the love and goodwill I was hearing, I brimmed with warm fuzzies as I recited half a dozen topics I could speak on. When we got to the topic of "performance-focused learner surveys" I practically oozed with elation. I talked about their importance and how recent audiences—even of learning executives—trembled in delight when they learned that traditional smile sheets could actually be dangerous. The person I was speaking with got fired up, too, but finally said this: "Learning measurement just isn't sexy enough to draw people to our meeting, so I think we should go with another topic."

What the heck? Learning measurement isn't sexy enough? Let me start this book by saying that learning measurement is pure sex—with titillating foreplay (evaluation work begins before the main event), naked truth (powerfully useful data), and the dangerous

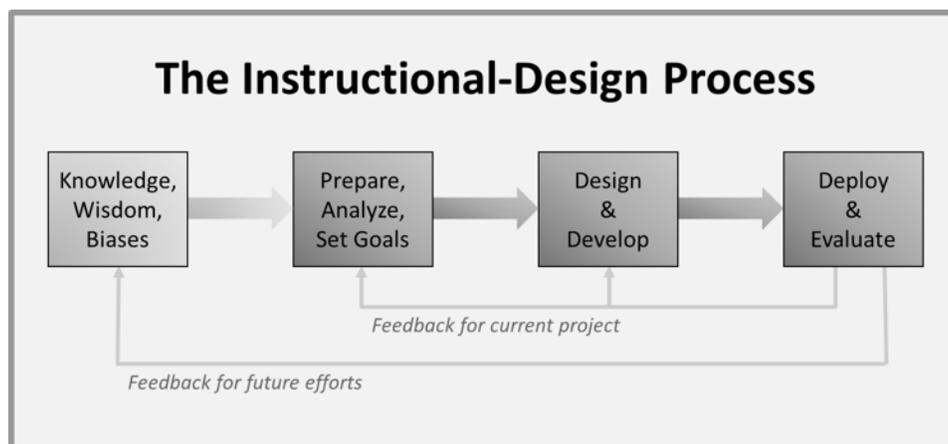
## Performance-Focused Learner Surveys

rapture of the potential for new life (evaluation feedback gives birth to learning innovation and improvement). Seriously! Learning measurement is one of the most important topics in learning and development—not only because most learning measurement is frustratingly impotent—but more pointedly, because simple improvements can help us take back control of our learning outcomes and learning designs!

I've been on the warpath on learning measurement for over a decade. I've written articles on learning-measurement bias. I've done numerous keynote addresses, featured sessions, invited masters presentations, and workshops on learning measurement. I almost always bring up the need for better learning measurement with my consulting clients. Why am I—a research-guzzling learning consultant—so crazy about learning measurement? Because learning measurement gives us feedback! It gives us feedback so we can improve what we're doing. It is one of the most important things we do! Without adequate feedback loops, we simply can't know whether we're doing any good at all. We can't know what to improve—or whether to improve.

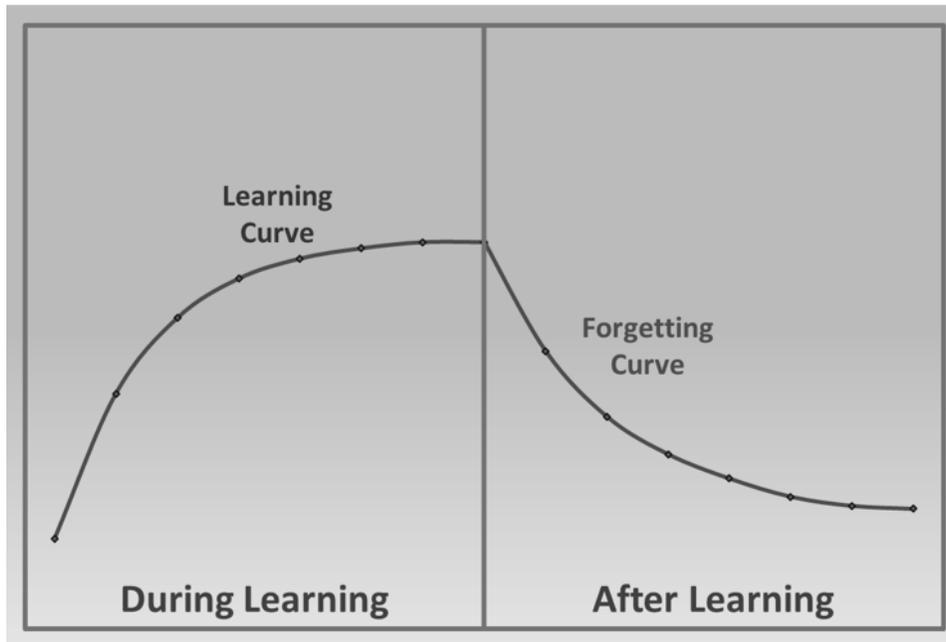
Without getting good feedback we frankly aren't worthy of the title “professional.”

In the diagram that follows, you'll notice the tried-and-true instructional-design process. In it, feedback loops show how the instructional-design process is supposed to work. We are supposed to get routine feedback so we can improve our current efforts and also improve our knowledge and wisdom, while reducing our biases. Rarely does it work as diagrammed.



We tend to measure learning at the end of learning events. This seems sensible, but it doesn't account for eons of research on human learning and forgetting. When we measure at the end of learning, we are measuring only our learners' *understanding* at that point in time; we are *not* measuring their ability to *remember* after the learning event. Look at the next diagram—of the learning and forgetting curves. You can see that, if we measure at the end of the learning event, the learners are at their highest level of memory retrieval. Of

course! Everything at the end of a learning event is top-of-mind. Things are easy to recall. When we measure at the end of learning, we are getting biased results. We are getting results that make us—and our learning interventions—look a whole lot better than the truth.



Similarly, when we measure in the learning context, we are also biasing our results. People aren't like computers. We don't just retrieve perfect packets of information from memory; we access a full range of associated memories. When a person is in the same context in which they learned, the stimuli in that context will remind them of what they learned. If the learning context is not the work context, then measuring learning in the learning context will produce more and better memory retrieval than the work context will—again producing biased learning-measurement results.

A third learning-measurement bias entails how we are measuring. As Sharon Shrock and Bill Coscarelli have pointed out in their brilliant book on criterion-referenced test development, the best measure of performance competence is actual performance.<sup>5</sup> If we're teaching someone to drive a forklift, the best way to measure their competence will be to have them drive a forklift—preferably in the same conditions they'll face on the job. If we can't measure real-world performance, we can simulate or have the learners make authentic scenario-based decisions as reasonable proxies for performance. What we don't want to do is just test learners on their knowledge of simple facts. Unfortunately, because it is a lot easier to measure simple knowledge than to measure deeper performance-focused

<sup>5</sup> Shrock & Coscarelli (2007).

## **Performance-Focused Learner Surveys**

know-how, most learning measurement is biased toward the retrieval of facts—even though such metrics are extremely poor predictors of real-world performance.

Just like these more direct assessments of learning, learner surveys should likewise be relevant to actual performance and as unbiased as possible. But, alas, most learner surveys suffer from the same issues as the three biases mentioned above. They are deployed only at the end of learning, only in the learning context, and only with poorly designed, irrelevant questions.

# About the Author...

## Will Thalheimer, PhD, MBA

Will Thalheimer is a learning expert, researcher, instructional designer, speaker, and writer. He holds an MBA from Drexel University and a PhD in Educational Psychology: Human Learning and Cognition from Columbia University. He has worked in the learning-and-performance field since 1985—playing a diverse set of roles, including leadership trainer, instructional designer, simulation architect, project manager, business product line manager, researcher, speaker, author, and consultant.

Beginning in 1998, Dr. Thalheimer dedicated his career to bridging the gap between research and practice in the workplace learning field, founding Work-Learning Research as his research and consulting practice. His clients have included giant multinationals, elearning companies, government agencies, trade associations, and universities.

In 2007, Dr. Thalheimer published a seminal research-to-practice report titled *Measuring Learning Results: Creating Fair and Valid Assessments by Considering Findings from Fundamental Learning Research*. Since then, he has been the learning-and-development field's most innovative expert in learning evaluation—publishing the first edition of this book in 2016, revolutionizing learner surveys; creating LTEM (Learning-Transfer Evaluation Model) in 2018, a replacement for the Four-Level Model; and devising a brand-new approach to learning evaluation, LEADS (Learning Evaluation As Decision Support), in the works to be published in 2023 in the book, *The CEO's Guide to Training, eLearning & Work: Reshaping Learning into a Competitive Advantage*.

Dr. Thalheimer is regularly asked to lead learning-audit workshops, write articles, do research, and give keynotes on the topic of learning measurement, presentation science, and the practice of using science-of-learning insights. Will co-created the innovative L&D Conference, the first learning-in-the-workflow conference. Will also co-founded the professional membership organization LDA (The Learning Development Accelerator)—where research-aligned practices are encouraged.

In 2021 Will Thalheimer joined TiER1 Performance as Principal. He has continued to publish important contributions and work with clients—and is currently crafting a new L&D framework, the Performance Activation Model, with support from Jerry Hamburg and other members of the TiER1 team.

# Index

- Acceptability Indexing, 52, 221, 222, 223, 224, 226, 227
- Actionable results, 30, 45, 52, 79, 130
- Adam Neaman, x, xv
- After-learning supports, 40, 42, 43, 52, 53, 57, 58, 73, 225, 230, 237
- Albert Einstein, xi
- Allison Rossett, xv
- Association for Talent Development, 250
- Awareness training, 32, 33, 34, 36, 43, 110, 210
- Bias, 8, 9, 10, 15, 16, 17, 19, 20, 22, 26, 27, 46, 47, 50, 53, 67, 69, 85, 92, 94, 97, 110, 139, 177, 185, 190, 200, 202, 204, 207, 208, 214, 218, 227, 237, 238, 239, 240, 251
- Bill Coscarelli, xv, 10, 18
- Business results, 244, *See Organizational results*
- Case method, 240
- Chad Udell, xv
- Charles Dickens, 15
- Clark Quinn, vi, xv, xvi, 249, 250
- Comparisons, 18, 24, 25, 52, 167, 191, 217, 219
- Confidence, 19, 20, 51, 110
- Context alignment, 22, 36, 38
- Contextual cues, 16, 18, 22
- Correlation, xviii, 3, 11, 12, 13, 24, 29, 75
- Creating a learner survey, 234
- Decisive Dozen, 36, 37, 38, 39, 40, 41
- Distinctive questioning, x, 48, 174, 181, 208, 232
- Donald Kirkpatrick, ix, 5, 244, 257
- Feedback, v, vii, xi, viii, x, xv, xvii, xviii, 4, 6, 7, 8, 21, 31, 33, 34, 36, 37, 40, 41, 62, 63, 65, 67, 68, 69, 71, 73, 75, 77, 79, 82, 89, 125, 126, 138, 141, 142, 147, 153, 154, 161, 177, 178, 190, 198, 200, 208, 209, 210, 211, 212, 214, 230, 231, 232, 235, 237, 238, 239, 240
- Focus groups, 238
- Follow-up learner surveys, 48, 53, 82, 96, 189, 190, 191, 192, 193, 200
- Forgetting, 9, 20, 122
- Four pillars of training effectiveness, 39, 43, 52, 53, 71, 73, 80, 86
- Fred Estes, 13
- Guy Wallace, xvi, 250

## Performance-Focused Learner Surveys

Incentives, 213, 214  
Instructional designers, vii, xiii, 46, 56, 125, 190, 198, 199, 231, 232  
Instructional-design process, 8  
ISPI, 251  
Jack Phillips, xv  
Jane Bozarth, xi, xvi, 4, 249, 250, 251  
Julie Dirksen, v, xv, xvi, 249, 250  
Karl Kapp, xvi, 249, 250  
Kirkpatrick-Katzell Four-Level Model, ix, 3, 5, 13, 14, 29, 192, 232, 243, 244, 245, 257, 259  
Leadership training, 240  
*LEADS*, ix, 233, 259  
Learner attention, 37, 38, 46, 81, 89, 133, 244  
Learner engagement, 33, 37, 38, 40, 41, 47, 53, 63, 75, 89, 90, 92, 126, 145, 146, 147, 169, 177, 181, 185, 186, 187, 208, 211, 212, 214, 239, 246  
Learner perceptions, 193, 220, 227, 234, 237, 240, 241, 246, 248  
Learner satisfaction, 6, 7, 29, 31, 40, 75, 246  
Learners remember, 20, 41  
Learners understand, 40, 41, 86  
Learning and forgetting curves, 9  
Learning Development Accelerator, xvi, 141, 250, 251, 259  
Learning effectiveness, x, 6, 7, 30, 52, 53, 75, 139, 140, 178, 246, 247, 257  
Learning evaluation, x, ix, 5, 7, 193, 243, 244, 245, 248, 249, 256, 257, 259  
Learning genome, 36, 48  
Learning Guild, xi, 4, 19, 251  
Learning Landscape model, 122, 123  
Learning Maximizers, 35, 36, 39, 40, 43  
Likert-like scales, 17, 18, 19, 23, 25, 26, 27, 46, 63, 67, 75, 92, 131, 142  
LTEM, ix, x, 5, 193, 227, 241, 243, 245, 246, 247, 248, 256, 259  
Marc J. Rosenberg, vi  
Matt Richter, xvi, 141, 250  
Measuring effectiveness, 29  
Meta-analysis, 11, 12, 13, 24, 29, 126, 139, 253, 255, 256, 257  
Mirjam Neelen, xi, xvi, 249, 250  
Motivate learners, 214  
Motivated to apply, 21, 40, 41, 42, 71, 105  
Motivating learners, 201  
Neil Rackham, 12  
Net Promoter Score, 19, 77, 138, 139, 140  
Nonresponse bias, 201, 203, 204, 206, 207, 255  
Numeric scales, 18, 19, 26, 46, 63, 208

- Objective measures, 5, 14, 241, 248
- Online whiteboarding, 239
- On-the-job performance, 2, 3, 22, 25, 32, 34, 39, 40, 43, 45, 73, 77, 82, 83, 110, 122, 189, 192, 229, 230, 231
- Organizational results, xiii, 5, 31, 233, 244
- Patti Shank, viii, xvi, 249, 250
- Paul Kirschner, 250, 251
- Performance assistance, 32, 33, 34, 43
- Performance training, 32, 33, 34, 35, 36, 43, 51, 84, 99
- Pilot testing, x, 91, 131, 174, 192, 232, 235
- Prior knowledge, 16, 40
- Raymond Katzell, ix, 5
- Realistic practice, 36, 41, 95, 97, 98, 99, 176
- Remembering, 16, 21, 25, 31, 32, 38, 39, 41, 43, 52, 53, 56, 73, 95, 96, 97, 101, 103, 116, 122, 124, 130, 168, 186, 190, 221, 222, 223, 231, 233, 237
- Repetition, 16, 19, 36, 37, 38, 41, 95, 101, 103, 207, 255
- Resilience, 107, 112
- Response rates, xi, x, 202, 203, 204, 205, 206, 207, 208, 209, 213, 214, 239, 253, 255, 256
- Richard Clark, 13
- Robert O. Brinkerhoff, v, xv, 5, 240
- Roy Pollock, vi, xv
- Ruth Clark, v, xv, xvi, 249, 251
- Scenario questions, 5, 14, 97
- Self-efficacy, 41, 107, 109, 110, 111, 114
- Sharon Shrock, 10, 18
- Smile sheets, vi, vii, ix, xvii, xviii, 4, 7, 8, 11, 12, 13, 14, 15, 17, 24, 25, 27, 29, 30, 31, 40, 41, 43, 52, 56, 73, 75, 139, 192, 215, 229, 231, 232, 237, 247
- Spacing effect, 38, 41, 95, 101, 253, 254, 255, 256
- Stakeholder management, xviii, 6, 7, 25, 30, 49, 51, 52, 55, 56, 57, 58, 84, 87, 89, 103, 125, 130, 139, 142, 175, 187, 192, 198, 215, 218, 227, 234, 244, 248
- Standards, 49, 50, 51, 52, 53, 75, 83, 84, 85, 89, 99, 109, 111, 131, 217, 218, 224, 227
- Stealth messages, 6, 52, 56, 57, 58, 89, 95, 103, 105, 112, 114, 118, 130, 145, 162, 199
- Structured interviews, 239
- Subjective inputs, 15, 16, 17, 27, 241
- Supervisors/Managers, vii, xiii, 2, 25, 33, 34, 42, 56, 58, 59, 63, 125, 126, 128, 161, 190, 191, 198, 199, 200, 210, 240, 241, 246, 247
- Thalheimer, 4, 58, 101, 126, 193, 240, 243, 252, 256, 259
- TiER1 Performance, 251, 252, 259
- Timing of learner surveys, 19, 20, 21
- Top of mind, 9, 19, 20, 189, 190, 200

## Performance-Focused Learner Surveys

Training design, 19, 30, 31, 39, 49, 227

Transmortify, 23, 24

Triangulating, 241

Triggering, 22, 26, 38, 41, 55, 95, 97, 103, 104, 105, 122, 168, 223

Work performance, 30, 32, 62, 82, 84, 130, 243, 247

Working memory, 20, 122, 218

Work-Learning Research, vii, 37, 248, 251, 259