

» **Fourth** Edition

25th
Anniversary

» *Active* » **Training**

A Handbook of Techniques,
Designs, Case Examples, and Tips

Mel Silberman &
Elaine Biech

WILEY

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Fourth Edition
Active Training

**A Handbook of Techniques, Designs,
Case Examples and Tips**

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Assisted by Carol Auerbach

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Preface

This fourth edition is built on the same solid foundation of active training originated by Mel Silberman. It's been an honor to be asked to revive the active learning work that Mel started. My goal is to continue to acknowledge his work throughout the book by respecting his voice, celebrating and expanding his ideas, and engaging others to pay tribute to Mel.

One of Mel's personal guidelines was, "It's not what you give them; it's what they take away that counts." Mel believed that it didn't matter how much information you disseminated. If the learner was unable to retain it, learning had not occurred. I followed Mel's advice as I edited this book. I tried to revise and add things that would make the content something you can take away.

Mel and I started in this field at about the same time, and although Mel coined the term "Active Training," both of us believed, practiced, and expounded identical philosophies throughout our careers. For a few years before I was solidly grounded in the history of learning and development, and before I'd heard of Malcolm Knowles, I thought I'd invented Adult Learning Theory. Mel and I had a good laugh about that when I first met him.

It's been twenty-five years since Mel's first edition of *Active Training: A Handbook of Techniques, Designs, Case Examples, and Tips* made its way onto our bookshelves. So it is fitting that 2015 has been selected for the fourth edition.

The Goals of This Book

Mel's staunch advocates still follow his active learning concepts. Many are represented throughout this and his *101 Ways to Make Training Active* books. Mel's unwavering support is based on the fact that his concepts work. Training is "active" when the learners do most of the work. Learners consider the content, solve problems, make decisions, and practice the skills. This ensures that they are ready to apply what they learned once they return to the workplace or wherever they intend to use their newly acquired skills and knowledge. Like its predecessors, this fourth edition of *Active Training* has three goals:

1. To explore all aspects of training

Training has a front, a middle, and an end. The front involves all the activities involved before the first slide or exercise is ever developed. Foremost are the assessment of the training need and the establishment of training objectives. The middle contains the detailed planning and delivery of the training program. The end focuses on the events that encourage back-on-the-job application, ongoing performance support, and the evaluation of training outcomes. This edition of *Active Training* provides a comprehensive examination of these three phases of training.

2. To promote an active approach to training

The active approach to training involves a commitment to *learning by doing*. Everything we know about adult learners suggests that participants must be actively engaged during a training program for results to occur. If there is little activity, participants will forget or fail to apply what they are taught and will be bored by the material presented. This new edition of *Active Training* continues to define what is meant by the active approach to training and how it can be practiced effectively. It goes beyond the

classroom and presents active learning ideas for virtual online classes, using social media, m-learning, and other exciting processes available to our profession.

3. To provide a practical handbook of techniques, designs, case examples, and tips

As *Active Training* promotes learning by doing, it shows how to acquire these skills through *learning by example*. It not only describes several active training techniques but also illustrates how they are applied in actual training situations. Designs and case examples drawn from private and public sector training professionals are presented to give readers ideas for their own situation. One of the special features of *Active Training* is the wide variety of training topics from which its examples are pulled. All of the examples are flexible enough to be customized to the topics and groups any reader might be training.

Since 1990, the year the first edition was published, much has happened. Training continues to be delivered in classroom settings but now is also delivered in new ways that were only a vision in 1990. The view of training as something that only occurs in classrooms has been broadened to include the concept that training means supporting learning wherever it occurs in the organization—in meetings, on computer screens, through mentors, during work team projects, or on your smartphone.

Many examples of training activities and designs are incorporated in this fourth edition. You will find case examples from a long list of training topics in *Active Training*. They include topics such as career development, change management, childcare, coaching, communication skills, conflict management, cultural diversity, customer service, leadership development, problem solving, project management, sales, succession planning, team building,

train-the-trainer, and others. They also come from a variety of industries including banking, government, health care, insurance, manufacturing, real estate, and others.

How This Book Is Organized

This book is organized into five parts: starting at the beginning with understanding more about active training and ending with new roles and realities for trainers.

[Part One](#) defines and contains a rationale for an active approach to training. It has been updated to reflect the latest theory, research, and practice. Among other things, it examines the case for active training. It contains a discussion of the nature of adult learning, exploring the reasons why adults learn best when they are active in the learning process. It also identifies the frequently asked questions people concerned with the introduction of active training techniques most often ask. Finally, it examines the contexts in which active training is delivered. While most training takes place in classroom-type settings, an active approach to training can be incorporated online, on the job, or in other delivery modes.

[Part Two](#) considers all the steps needed, from the opening to the closing elements, to create an instructional design for an active training program, course, workshop, virtual classroom, or session. You will find these names interchangeable throughout the book. You may find yourself needing to just tweak a course a bit or you may be in complete control over a course design. It is in this situation, when trying to make multiple design decisions that make up a professional training program, that the many tips, designs, and case examples described become especially useful. You will find examples for online learning sprinkled throughout the entire book, but may notice them here more than ever. [Chapter 10](#), “Incorporating Active Training in All Learning,” has been revamped and includes additional discussion about online learning and an expanded discussion of social media and m-learning.

[Part Three](#) covers every aspect of training delivery, including climate setting, enlisting participation, managing participant behavior, and staging experiential activities. This fourth edition of *Active Training* emphasizes what you can do to create an experience for your participants. You will find new examples and templates throughout.

[Part Four](#) examines how to extend the value of training through follow-up activities and evaluation. You will find both of these chapters expanded. The follow-up activities tap into the expanded Kirkpatrick model to include return on expectation (ROE) as a measurement tool.

[Part Five](#) is an entirely new section. It presents two chapters. “The Expanded Roles for Trainers” looks at how you can use Active Training methods in your onboarding programs, when you are called upon to lead change, when and why you coach managers, and several other roles. A second all-new chapter, “New Business Realities for Trainers,” provides ideas when your job calls on you to do more with less, participate in globalization or vendor management, work with a multigenerational workforce, and other new focuses.

If you are new to the training environment or a student studying the field for the first time, reading *Active Training* can help you to learn the reasons why trainers make the design and delivery choices they do when creating an active training program. In addition, you will learn a variety of facilitation techniques that can help you to conduct any training program professionally. The examples help you to make sense out of the components of a good active training program in a way that straight text never could.

I hope that *Active Training* will continually provide you with specific guidance as you reference the book throughout your career, whether you work in a business,

governmental, or educational setting. The book is meant to be practical and helpful for you.

Elaine Biech

Norfolk, VA
April 2015

Part One

Introducing Active Training

Training is a method of enhancing human performance. Whenever a person's ability to perform a job is limited by a lack of knowledge or skill, it makes sense to bridge that gap by providing the required instruction.

Sounds simple, doesn't it? Not really. The problem begins with the notion that learning something you don't already know requires another person (a trainer) or medium (a book, a computer) to provide it.

One of Mel's favorite exercises was to cover a wristwatch with the opposite hand and ask those who are observing, "What am I doing?" Immediately, someone would say, "You're covering your watch." He would then request a synonym for the word *cover*. Typically, suggestions such as *hide*, *obscure*, or *block* are given. With this opening, he would say, "The next time *you* have something to cover with a person whom you are training, you might be hiding the information, obscuring it, or completely blocking it from view. That's because, at that moment, it's *your* information and *your* understanding of it. It does not belong to the *other* person." Mel's point was that as trainers we need to think about "how" we are "covering" the topic, making sure that we do not prevent the learner from "uncovering" it; this "uncovering" process only happens by virtue of the learner's own activity. Ultimately, you—or a book or a computer—cannot do the work for the learner.

Active training occurs when the participants do most of the work. If you neatly package the information or elegantly demonstrate the skills, you, not the participants, are doing "the work" for them. No one is suggesting that well-designed instruction is unnecessary. The key to effective

training, however, is how the learning activities are designed so that the participants *acquire* knowledge and skill rather than merely *receive* them.

Yes, there is a whole lot more to training than “show and tell.” Learning is not an automatic consequence of pouring information into another person's head. It requires the learner's own mental involvement and doing. Lecturing and demonstrating, by themselves, will never lead to real, lasting learning. Only training that is active will.

In order for people to learn something well, they must *hear* it, *see* it, *question* it, *discuss* it with their peers, and *do* it. They may even *teach* it to someone else in order to solidify their understanding of the information or skill. An active approach to training requires a variety of strategies that promote all six processes—*hearing, seeing, questioning, discussing, doing, and teaching*. Let's consider more fully why.

The Nature of Adult Learning

Over twenty-four hundred years ago, Confucius declared:

What I **hear**, I *forget*.

What I **see**, I *remember*.

What I **do**, I *understand*.

These three simple statements speak volumes about the need for active learning. As only Mel could do, he modified and expanded the wisdom of Confucius into what he called the Active Learning Credo:

*When I only **hear**, I forget.*

*When I **hear** and **see**, I remember a little.*

*When I **hear**, **see**, and **ask questions** and **discuss** with someone else, I begin to understand.*

*When I **hear**, **see**, **question**, **discuss**, and **do**, I acquire knowledge and skill.*

*When I **teach** someone, I master what I have learned.*

Why Is This Important?

Hearing and Seeing. You've probably read "pop data" that insists that participants retain less when listening to lecture and more when what they hear is paired with a visual; they retain even more when they practice by doing. There are several reasons why most adults tend to forget what they hear. One of the most interesting has to do with the rate at which a trainer speaks and the rate at which participants listen.

Most trainers speak at about one hundred to two hundred words per minute. But how many of those words do participants hear? It depends on how they are listening. If the participants are really concentrating, they might be able to listen attentively to about half of what a trainer is saying. That's because participants are thinking while they are listening. It's hard to keep up with a talkative trainer. Even if the material is interesting, it's hard to concentrate for a sustained period of time. Participants probably hear at the rate of four hundred to five hundred words per minute. When they are listening for a sustained period of time to a trainer who is talking more slowly they are likely to get bored and their minds will wander. The upshot? A steady diet of lecture is problematic, because the lecturer and the listener are often not in synch.

To alleviate the audio bombardment of lecturing, master and trainer and CPLP Fellow, Bob Pike, recommends that participants should be given a chance *every eight minutes* to internalize what they have been hearing before it's simply supplanted by the next wave of information (Pike 2003). Ruth Clark (2014) points out that still visuals are helpful to learning; they generally impose less mental load than animated visuals. Still visuals have been shown to be more effective to teach general content (animated visuals are better for procedures). That could be true because between 80 to 90 percent of all information that is absorbed by the brain is visual (Jensen 2008).

When teaching has both an auditory and a visual dimension, the message is reinforced by two delivery systems. It not only helps to use presentation slides along with meaningful words, but several other sources of visual information can be utilized, such as objects, documents, and vivid stories. Some of us prefer one mode of delivery over the other. By using both you have a greater chance of meeting the preferences of more participants.

But merely hearing something and seeing it is not enough to learn it. Let's explore the reasons why.

Ask questions and discuss. The adult brain does not function like an audio or video recorder. The brain doesn't just receive information; it processes it. The brain is suffused with a vast number of networks through which it sorts out all incoming information. Thus, any information already stored influences how and what we understand and eventually learn. Your brain tries to make connections.

If adults discuss information with others and if they are invited to ask questions about it, their brains can do a better job of connecting with information they've already stored. That's because the act of learning begins with a question. The brain starts the work of learning because it

has a question about information it is obtaining from the senses (hearing, sight, touch, and taste) that feed it. If the brain could talk, it would say things like: *Where does this information fit? Does it confirm what I already know? Does it challenge what I already know?*

If the brain isn't curious about incoming information, however, it takes the path of least resistance and attends to something else. Therefore, getting participants to ask questions puts them in a seeking mode rather than a passive mode. Their brains are activated to obtain answers rather than merely "logging in." If participants are asked to listen to a lecture or view presentation slides and they come to it with few or any questions, their brains treat the information superficially. If they are trying to find out something, their brains treat the information carefully.

Better yet, if adults can discuss the information with their peers, they can obtain feedback about how well they understand it. Learning is enhanced if people are asked to do the following with their peers:

- State the information in their own words
- Give examples of it
- Have an opportunity to reflect on the information
- See connections between it and other facts or ideas
- Practice higher-order thinking, such as analysis, synthesis, and evaluation
- Apply it to case situations

Even better is the opportunity to do something with the information. Research conducted at Stanford University (Levin 1996) suggests that the optimal environment for learning allows people at different times to be partners, teammates, and teachers. In a training context, this occurs

best when learning teams are organized to engage in “action learning” tasks. They challenge participants to solve problems and apply what they know to real work situations. Furthermore, giving participants the opportunity to learn information or a skill and then teach it to peers allows them the opportunity to discover what Aristotle declared many years ago, “Teaching is the highest art of understanding.”

In many ways, our brain is like a computer and we are its users. A computer needs to be “on” in order to work. Our brain needs to be on as well. When learning is passive, the brain isn't on. A computer needs the right software to interpret the data that are entered. Our brain needs to link what we are being taught with what we already know and how we think. When learning is passive, the brain doesn't make these linkages to the software of our mind. Finally, a computer cannot retain information that it has processed without “saving it.” Our brain needs to test the information, recapitulate it, or explain it to someone else in order to store it in its memory banks. When learning is passive, the brain doesn't save what has been presented.

What occurs when trainers flood participants with their own thoughts (however insightful and well organized they may be) or when they rely too often on “let me show you how” demonstrations and explanations? Pouring facts and concepts into participants' heads and masterfully performing skills and procedures actually interfere with learning. The presentation may make an immediate impression on the brain, but without a photographic memory, participants simply cannot retain very much for any period of time, even though they think they will never forget it. As Eric Jensen, author of *Brain-Based Learning*, explains, “The traditional stand and delivery approach is brain antagonistic. The brain is not very good at absorbing countless bits of semantic (factual) information.”

In any case, real learning is not memorization. Most of what we memorize is lost in hours. In order to retain what has been taught, participants must chew on it. Learning can't be swallowed whole. A trainer can't do the mental work for participants because they must put together what they hear and see to form a meaningful whole. Without the opportunity to discuss, ask questions, do, and perhaps even teach someone else, real learning will not occur.

Further, learning is not a one-shot event; it comes in waves. It takes several exposures to material to understand. It also takes different kinds of exposures, not just a repetition of input. For example, a software application can be taught with manuals, through classroom exercises, and through an asynchronous online class. Each way shapes the participants' understanding. Even more important is the way in which the exposure happens. If it happens *to* the learner, there will be little mental engagement *by* the learner.

When learning is passive, learners come to the encounter without curiosity, without questions, and without interest in the outcome. When learning is active, learners are *seeking* something. They want an answer to a question, need information to solve a problem, or are searching for a better way to do a job.

David Rock is the director of the NeuroLeadership Institute and author of *Your Brain at Work*. He uses an AGES model that identifies four requirements to embed ideas:

1. Attention must be very high; multitasking dramatically reduces recall. The chemical processes to encode memory are activated when we are very focused.
2. Generating a mental map around the new ideas; participant can't just watch or listen.

3. Emotions need to be high; we only remember things we feel strongly about.
4. Spacing learning is critical.

A high AGES score is required for participants to recall ideas. Attention, generation, emotion, and spacing form the AGES model. Practicing in the form of small group work, gamification, contests, or team teaching can all increase a learning event's AGES score.

Practicing. Quite a few studies have compared learning outcomes among individuals playing a game with individuals assigned to a more traditional instructional method such as lectures or computer tutorials. In these studies the same content is presented in a game version and in a traditional version and learning is measured with a test. In her book *Evidence-Based Training Methods*, Ruth Clark (2014) reports that results aren't clear cut; however, in one study simulation games resulted in learning gains 9 to 14 percent higher than comparison groups. However, the comparison groups learned more than the game groups when taught with active instructional methods. The game groups learned more than the comparison groups when the comparison group was taught with passive instructional methods. Ruth states, "My conclusion from the review is that active engagement leads to learning and any method that incorporates relevant active engagement (with feedback) will lead to better learning than a method that relies primarily on passive learning environments such as lectures or reading."

The bottom line here? Telling is NOT training. As Harold Stolovitch and Erica Keeps suggest in their book, *Telling Ain't Training*, there's much more to it.

The Social Side of Learning