

KARL M. KAPP

ACTION-FIRST LEARNING

**Instructional
Design Techniques
to Engage and Inspire**

More Praise for *Action-First Learning*

“Karl Kapp’s *Action-First Learning* is a must-read for anyone in L&D. It offers clear, actionable strategies to create learning experiences that truly resonate with participants and drive real-world results.”

—David Kelly,

Chairman, The Learning Guild

“Karl’s latest book brilliantly combines learning with interactivity and fun. It ensures effective learning experiences and meaningful results in today’s distracted, AI-driven world.”

—Christina Holloway, CPTD, SHRM-SCP,

Director, Learning and Development, NTT DATA

“Get ready to shake up traditional learning! This book is a valuable resource for anyone aiming to make learning more engaging. In addition to introducing the Action-First Learning Framework, it’s packed with practical strategies, real-world case studies, and AI-powered tips. Discover a fresh approach to elevate how you teach and learn.”

—Jessica Briskin, PhD,

Associate Professor, Commonwealth University, Bloomsburg

“This is exactly the kind of idea book I like to keep handy. Another practical gem from Karl Kapp, *Action-First Learning* underscores just how important it is to engage learners up front and offers design guidelines for nine versatile game structures. It also contains inspiring examples that will spark your creativity. I highly recommend it!”

—Catherine Lombardozzi,

Learning Strategy Consultant and Founder,

Learning 4 Learning Professionals

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Preface

When I reflect on my career in instructional design and educational technology, a memory from my early professional days often resurfaces. I was hired to train people to use a software tool that helped manufacturers with materials requirements planning. I knew nothing about manufacturing, so I signed up for a series of courses to learn about the industry, its terminology, and how products were produced. I thought it would make me a better trainer if I understood the purpose behind the software in addition to knowing which values to insert into which fields. I was highly motivated to learn, and I couldn't wait to get to the first session.

I arrived at the training center, located deep in an industrial park, on a sunny afternoon. I heard a lawn mower humming in the background as I took my seat near one of the windows. I saw an overhead projector at the front of the room next to a huge stack of slides the instructor would use to teach the class.

Immediately, I struggled to stay engaged. The instructor monotonously recited information directly from the slides and his dog-eared teacher's guide. He spoke with no emotion, as if unaware of the two dozen learners in the room. Slide after slide after slide.

I watched the clock and focused my mental energy to see if I could make the time pass more quickly—to no avail. My head hurt from listening to the instructor's dull drone. The sound of the lawnmower was musical in comparison. I contemplated leaving at the break and never returning.

“There has to be a more effective way to learn this material,” I thought. As I stared out the window, I began to envision an environment in which this training could come alive through interactive activities, making the content tangible and relevant. In my head, I started to construct a game to bring the manufacturing floor into the classroom.

I ended up surviving to the end of the course—barely. But the lessons I took away had nothing to do with the content the instructor was trying to

share. Shortly after that ordeal, I began pursuing the passion that has animated my whole career: making training experiences engaging, learner focused, and—dare I say it—fun.

I started by teaching and writing about using games and gamification in instructional design. After years of resistance and misunderstanding, the concept has now taken off, and I've published books on gamification and created gamification and interactive learning courses on LinkedIn Learning; gamification is now built into learning platforms as a matter of course and there are even gamification graduate certificates. The global push toward interactive learning has helped spread the gamification concept to many more people. What is most gratifying is that the gamification movement has saved so many learners from the mind-numbing experience I had early in my career.

But there was more to be done. My quest to transform the L&D landscape to make it more learner focused and meaningful continued. I realized that the words *game* and *gamification* often stood in the way of my students, executives, training managers, and readers understanding a more fundamental value: the need to encourage learners to *do something*—to *take action*.

Academic research, learner feedback, and my personal experiences all show that when learners do something right away during the learning process, they are more fully engaged. The immediate action seems to set the tone for the rest of the instruction period. Over the years, I gathered different methods, practiced different approaches, and honed my action-first techniques to ensure learners realize the greatest benefit. As a result, I've finally developed the Action-First Learning Framework you find in this book. Action for action's sake is not the goal of action-first learning. The goal is *purposeful* and *meaningful* action—always tied to learning. I can attest that participants are always more fully engaged in my workshops and graduate classes when I ask them to first take action. Even if I lecture later in a session, their enthusiasm and energy remain high.

When I began to use the term *action-first learning* regularly in the classroom, in online learning modules, and in designing training workshops, I immediately thought of Action Comics. Although it's now associated

primarily with Superman, the first issue of Action Comics (which was published in 1938) was an anthology of 11 different stories—only one of which was about the Man of Steel.

When I began to codify my thinking about action-first learning experiences, I realized this book should also be an anthology bringing together the nine most successful techniques for creating action-focused learning that leads to better critical thinking, communication, and social interaction. The results are in your hands. Consider each action-packed technique, understand its value and purpose, and implement it in your designs using the step-by-step instructions presented here.

But I didn't write this book alone. Along the way, I've been lucky to work with some wonderful practitioners and vendors who have drawn on their own experiences in the field to contribute some of the case studies included here. Jessica Angove of Tipping Point Media, Anders Gronstedt of The Gronstedt Group, and Natalie Roth of Centrical all generously share fascinating case studies that allow you to learn how someone else has used an action-first technique to solve a real-world challenge.

I'm also indebted to Amy Pape, who shared her passion for making learning more accessible by writing chapter 11 on how anyone can make the action-first design process more accessible to all learners. I firmly believe that when we design with a multitude of abilities in mind, we design for everyone.

And of course, I couldn't produce a book about action-first learning without paying further homage to Action Comics. I asked my colleague Kevin Thorn to lend his expertise to the chapter on comics as an action-first learning technique. In addition to his work as an accomplished e-learning designer, Kevin is also an illustrator and contributed the comic-style artwork in each chapter to inject a bit of fun and whimsy—just as I suggest you do in your learning designs. I think everyone loves finding Easter eggs, nods to pop culture, and surprises mixed with more serious topics, so I hope you enjoy the ones I've sprinkled throughout *Action-First Learning*.

Reflecting again on my own experience daydreaming in that painfully dull training class years ago, I now know for certain how different it

could have been. I also know how different—and better—all such learning experiences can be if we all take an action-first approach to their design.

I'm calling on everyone in our professional community to recognize that learning is a dynamic, ongoing process—and that we need new tools to take advantage of that. I wrote *Action-First Learning* as one such tool that can help you build compelling, effective, action-first experiences for the learners you serve. I hope you enjoy the techniques, tips, and examples I've honed over the years. Together, by taking action, we can transform learning.

Karl M. Kapp, EdD, Professor of Instructional Design and Technology
Commonwealth University

Introduction



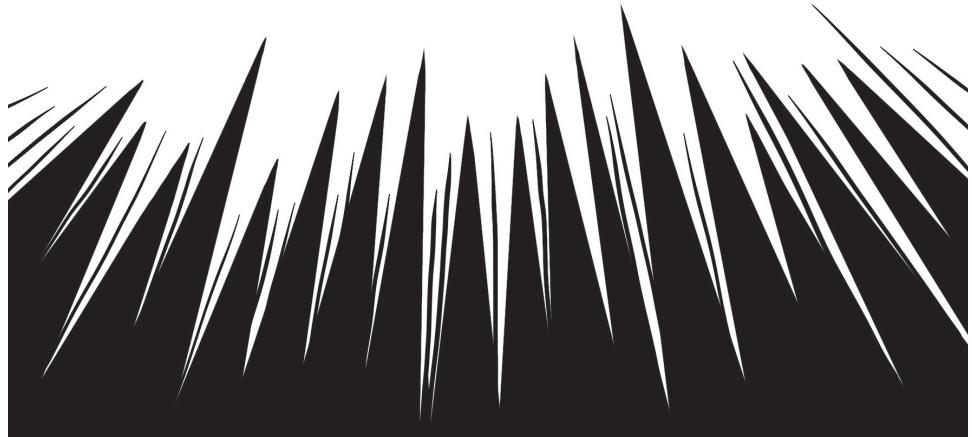
Let's do a memory-recall experiment. Close your eyes for a moment and envision the most boring, mind-numbing training or learning experience you've ever had. It can be an online learning experience in an e-learning module, an in-person classroom lecture, or even a virtual classroom experience. Jot down the attributes that made it boring and mind-numbing, as well as what could have been done to lessen the boredom. Now, write down a vow to never let anyone endure that kind of experience again. Not on your watch. Mind-numbing learning is a design decision. We can all do better. (*Find the explanation at the end of the chapter.*)

We've all been there. You walk toward a classroom with a group of fellow employees for mandatory training. The topic is evidently important to someone, maybe even you, but you're a bit fuzzy on the details of what's happening. You enter the fluorescent-lit room with coffee in hand. You see a stack of handouts, each 75 pages long. You brace yourself for a long day.

Or maybe you click on the link to the online learning module you've been assigned and immediately see a wall of objectives, slides with fancy bullet points, paragraphs of content spread out over five or six screens, some click-to-reveals, and the occasional multiple-choice question embedded in the module because . . . interactivity is good, right? As your head nods for the fifth or sixth time and you try to stifle a monumental yawn, you wonder if anyone gets anything out of this type of instruction. Spoiler alert: They don't.

Maybe you've designed, developed, and delivered experiences eerily similar to those I've described or those you wrote down in the action-first

INTRODUCTION



activity that opened this chapter. These types of experiences need to end for you and your learners.

This book is a road map to a better place, with detailed instructions and tips intended to help you stop designing mind-numbing learning experiences. In these pages, you'll find a variety of what I call *action-first learning techniques*, which will engage, inspire, and educate your learners.

Action-first learning becomes especially important in this age of artificial intelligence (AI). In a world where typing a simple sentence into an online tool produces pages of AI-generated digital text, images, automated flashcards, or quiz questions, your learners aren't just looking for content. They're looking for learning experiences that reinforce what they know, test their comprehension, and help them practice the skills they've just been taught. That's action-first learning.

Our learners need these kinds of experiences. If, as L&D professionals, we are going to help develop our fellow employees' abilities to think critically, solve problems, negotiate, communicate, and lead others, we need to provide learning through action. We don't need more people who can only passively read, listen to a lecture, sit in front of a computer screen, and click *next* when prompted. We need to leverage what we know about the science of human learning and encourage learners to act, to learn by doing, and to apply problem-solving and critical thinking skills *during the learning process*—not just hope they will do all those things back on the job. As instructional designers and learning experience designers, we are competing with too many external stimuli—including smartphones, smartwatches, and even smartglasses—to create dull, actionless learning designs.

Actionless learning just doesn't work anymore (if it ever did). The alternative—based on research, personal experience, and common sense—is action-first learning design. As instructional designers, trainers, educators, facilitators, and learning experience designers, action should be our go-to tool.

It's our responsibility to encourage learners to engage actively and playfully with content, their peers, and difficult processes like critical thinking. Why "playfully"? Because research shows that children learn best and most naturally through play. Educators describe play-based learning as a

highly effective model in which children explore, experiment, and engage with their environment in ways that are both enjoyable and educational.

If play works so well for young, developing minds, why not also design workplace training using this concept? It doesn't mean we should abandon traditional instructional design principles or ignore the fact that many of us are working on serious endeavors in which out-and-out play might not be practical. It means we, as designers and facilitators of instruction, need to work carefully, strategically, and methodically to include elements of play in our learning experiences—and action is a key element of play.

Few children play by sitting in a chair, facing forward, and listening passively to a friend read from a piece of paper or a slide. Rather, they explore, use their imaginations, interact with peers, create games with their own rules, try on roles (such as firefighter, dinosaur, astronaut, or teacher), race each other, take things apart, and manipulate language through made-up songs or rhymes. In short, they learn through action.

However, too few of our instructional design models or research studies in training and development are focused on action or engagement; instead, they focus on topics like learning objectives, the optimal length of videos, or the value that a talking-head video adds to instruction. In the traditional research and design models that are widely taught and disseminated, what is missing are practical, in-the-trenches tactics for encouraging action and practicing learning outcomes within learning experiences.

I've observed firsthand in classrooms how the atmosphere, energy level, and enthusiasm for instruction completely change when I start with action. The simple act of calling on learners to do something like solve a mystery, pick a card, take on a role, or explore a website changes the nature of the learning. It encourages peer-to-peer collaboration and exploration, and, dare I say, makes the learning more fun and meaningful.

Action is the missing piece in our design models, approaches to teaching, and academic theories. Unfortunately, the lack of widespread attention to action-first learning means that there aren't many resources for designers, developers, facilitators, and trainers to turn to when we need to create engaging, playful, active instruction. This is why I developed

the Action-First Learning Framework. I've advocated for this approach for many years through gamification and game-based learning, but this is the first time I've gathered the most effective action-first techniques in one place and explained when they are most useful for designing meaningful instruction. This is an introduction to the Action-First Learning Framework and a guide to help you convert your actionless designs to action-first learning experiences.

Why Now?

Do we have to embrace action-first learning right now? Can't we just take it slowly?

In the coming years, learning designs that lean on uninspired, passive presentations of content will be replaced by various forms of artificial intelligence. Organizations won't need humans to design those kinds of experiences. However, employees and organizations will still need and crave richer, more compelling learning designs from human creators—designs that use imaginative techniques and strategies to transfer knowledge, teach and reinforce soft skills, change behavior, and add meaning and purpose to learning experiences.

If, as L&D professionals, we want to have a more profound impact on employees and organizations, we urgently need to rethink how we craft learning experiences. We must move away from simple designs, slides listing content in bullet points, and lectures. Now is the time to embrace the action-first learning mindset, philosophy, strategies, and techniques.

More Meaningful Learning

Crafting a worthwhile action-first learning experience requires that we infuse two kinds of meaning into all aspects of our action-first designs:

1. **Outcomes need to result in meaningful behavior changes that the organization values.** Through action-first strategies, designers can better engage learners' cognitive domain to improve their *analytical*, *evaluative*, and *creative* abilities to meet organizational goals. In addition, when physical skills and abilities are required, action-first approaches can improve

learners' mastery of physical movements, manipulation of tools and machinery, and other key skills.

2. **Learning experiences must be meaningful to the employees themselves.** Employees should want to undertake the experience and value the outcomes on both a personal and professional level. If we don't try to engage learners' emotions, or the *affective domain*, we may endanger our desired outcomes. Combining learning with a bit of fun, interactivity, and memorable experiences can make all the difference.

What's Ahead

In the chapters that follow, I'll first define my Action-First Learning Framework in more detail and share some of the educational theories supporting action-first learning. Then, we will explore nine distinct types of action-first experiences and why each is effective. I'll include compelling case studies that bring each strategy to life, plus learning design checklists and tips. Every chapter has a sample prompt or two to help you deploy AI tools as you design your action-first experiences, as well as links to resources you can use to improve your knowledge and implementation of action-first learning designs.

In an effort to put action-first learning into practice, even in the more passive medium of a book, each chapter begins with an action you need to take. You could just skip that action because no one is looking over your shoulder, but if you join in, the actions you take will not only increase your knowledge but also make reading the book more enjoyable.

The nine types of action-first learning experiences covered in the book are:

1. **Card games.** These are simple, easy to play, and almost universally understood. They can be configured in a variety of formats, both physically and digitally. These traits make them an ideal tool for delivering engaging and meaningful instruction.
2. **Board games.** These can deliver insights into systems thinking that are hard to achieve through conventional instructional

methodologies. They can be used to teach skills related to resource allocation, prioritization, and critical thinking.

3. **Escape rooms.** In a physical or virtual escape room, a learner must apply problem-solving and communication skills to a specific set of challenges. Escape rooms encourage critical thinking and higher-order problem solving.
4. **Comics.** These combine visual and textual storytelling in a sequential format that is engaging and informative. Comics help learners follow a logical progression of ideas, enhancing comprehension and retention while including the learner as an integral part of the experience.
5. **Branching scenarios.** A branching scenario offers learners an authentic context in which to make decisions and witness the consequences of those decisions for an especially robust learning experience.
6. **Live interactive experiences.** Traditionally, live classroom instruction has been a static, one-way exchange of information. With modern technologies, we can design an interactive two-way exchange that combines storytelling, learning, and real-time feedback tailored to the learning audience.
7. **Augmented reality.** AR allows a learning designer to superimpose an image or text on a learner's view of the real world. This composite view enhances the learner's experience of the content. AR demands that learners actively engage with content that is virtually right in front of them.
8. **Virtual reality.** Sometimes called "the metaverse," VR is a fully immersive, 360-degree experience that provides opportunities for a learning designer to work in both the cognitive and affective domains. All the learner's senses can be engaged in these high-fidelity experiences.
9. **AI-assisted coaching.** AI tools can create interactive conversations and highly reactive ad hoc training moments. They can be bundled to create a "coach in your pocket," allowing learners to take action and engage with the coach in any learning situation.

After exploring all these approaches, we will also consider how to improve action-first learning design by making it more accessible to all learners. And in the final chapter, I'll walk through how to plan and implement your own action-first design, and how to get buy-in from your organization.

By now, I hope that I've aroused your curiosity about the Action-First Learning Framework and that you're eager to discover the tools and techniques that can turn any learning session into an engaging, effective action-first learning adventure. I've designed this book so you can bounce around from chapter to chapter and don't need to progress in a linear fashion. If you're interested in making a specific type of action-first experience, go right there. If you want a comprehensive view, jump to the last chapter.

The important thing is that you take action. So, try the action-first activities at the beginning of each chapter and check out the QR codes, worksheets, and videos mentioned throughout the book. Implement some of the ideas and keep a journal of how they worked and what you might do differently next time.

You can't design action-first learning unless you take action.

To paraphrase Ferris Bueller, "You're still here? This chapter is over. Go to the next chapter . . . Go!"

EXPLANATION OF THE ACTION-FIRST ACTIVITY

Visualization can be an incredibly useful action-first learning technique. By envisioning the most boring learning experience and then thinking through how it could have been better, you are engaging in the first action needed to design and deliver a more engaging, action-first learning experience.

Actions Speak Louder Than Words



Take a moment to write down your own definition of action-first learning (no looking ahead!). As you read the chapter, see if yours matches the one I provide. What are the common attributes of the two definitions? What are the differences? Do you agree or disagree with my definition? (*Find the explanation at the end of the chapter.*)

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

- Why is the term *action-first learning* valuable?
- Why is action-first learning so effective?
- What theoretical foundations and research support action-first learning?

Most children—including me—let their imaginations run wild while playing with action figures. As adults, we take pride in acting decisively at work when circumstances demand it. And we share our experience, knowledge, and skills by directing the action of others.

As designers and facilitators of instruction, we can take a cue from these near-universal experiences: action as play, action in the workplace, and action as education. Instead of passively taking in information, we can encourage learners to engage actively and playfully with content, their peers, and with difficult processes like critical thinking.

Providing passive learning experiences does little to foster engagement, spark creative thinking, or motivate learners. As passive, uninspired presentations of content are replaced by various forms of AI, organizations and employees will continue to value richer, more inspiring



learning designs created by humans. These learning experiences will transfer knowledge, teach and reinforce soft skills, change behavior, and add meaning and purpose to the content—not to mention helping to build culture and connections within organizations.

If, as L&D professionals, we want to have a more profound impact on employees and organizations, we urgently need to rethink how we craft learning experiences. We must move away from simple designs, basic slides listing content in bullet points, and passive online or face-to-face lectures. It's time to embrace an action-first learning mindset and philosophy. (*Cue dramatic music.*)

Why Action-First Learning?

The concept of *action-first learning*—or directly involving learners in the process of acquiring knowledge and skills in an active way—is not new. Instructional designers, facilitators, and teachers have long advocated for *learning by doing*, *action-based learning*, *active learning*, *learner-centric designs*, and *problem-based learning*. So, why do we need yet another term in the already crowded lexicon? I'm advocating that we adopt the term *action-first learning* for three reasons:

- 1. Instructional designs should encourage each learner to act as soon as possible in a learning experience.** A long preamble or a ton of prework simply bogs down the process. Engaging learners from the beginning is crucial, and encouraging some form of action at the start of a learning experience draws everyone into the content. It's much harder to regain a learner's attention after they have disengaged than to initially grab their attention.
- 2. The term action-first learning helps us avoid some preconceived notions about learning design.** Many of the terms I've mentioned already have specific definitions in an academic context. Purists usually won't stand for deviations or colloquial uses of terms they've relied on for years. For example, the term *action-based learning* was originally coined in the 1940s by professor and management consultant Reginald

“Reg” William Revans. He proposed more than 23 criteria for what does and does not constitute action-based learning (Willis 2004). Although such meticulous definitions are appropriate in an academic setting, saddling a learning practitioner with 23 markers to determine what is and isn’t action-based learning is counterproductive and unnecessarily onerous. *Action-first learning* is a more flexible term that represents active, engaging learning design as an approach to developing meaningful instruction.

3. **Action-first learning allows the L&D community to make engaging, meaningful, active learning part of a broader design philosophy.** Like the well-known improvisational theater technique, the term *action-first learning* is based on saying, “Yes, and . . .” This response allows people to move forward and collaborate, regardless of the situation unfolding on stage or in a virtual or in-person classroom. In improv theater, when a suggestion is made onstage, other performers never challenge or reject the statement; instead, they agree to what was said (Yes!), and then add something new from their own perspectives (and . . .). In a learning experience, action-first learning says yes to the learner’s need to participate first, and then adds more information, questions, or actions from the learning designer’s perspective. It is learner centric in a way that is understandable. It’s not abstract; it’s a concrete, tangible approach.

A Far-Reaching Definition

In this book, I define *action-first learning* as, “A philosophical approach to designing meaningful instruction that highlights the need for learning experiences to require learners to take immediate or initial actions that gain their attention, activate their senses, and encourage them to think critically and carry that orientation toward action throughout an entire learning experience, culminating in active reflection.”

Let's analyze each element of this complex definition and check yours to see how they compare. (I'll bet your definition was a lot shorter.)

A Philosophical Approach

From ancient Greek, the word *philosophy* means a “love of wisdom.” In a practical sense, philosophy is the study of how we understand fundamental truths about the world we live in and our relationship with that world, gaining wisdom in the process. Action-first learning is a way of understanding learning and learners’ relationship to what they are learning. It is not a step-by-step design methodology. Action-first learning allows us to view the process of crafting instructional design from a higher vantage point and to drive more practical, on-the-ground decisions from that philosophical point of view.

Designing Meaningful Instruction

Again, action-first learning is not action for action’s sake. We should never make learners do silly things or just keep them busy, and we should always aim toward action as meaningful instruction. You will need to undertake a rigorous analysis process to determine what actions and activities are most valuable to individual learners and your organization.

Because designing and delivering instruction requires significant investments of time and money, you should focus on the desired outcomes. If learners and your organization don’t see the benefits of the action-first learning designs you create, go back to analyze whether the instruction is needed and if you’re using the right design to achieve the desired results. This is a critical aspect of moving toward action-first learning.

Make. It. Meaningful.

Learners Take Immediate or Initial Actions

Many learning designers have gotten into the habit of including an initial period of lecturing in their designs without allowing learners to engage in any action first—or at all. In part, we can blame learning objectives for this. In fact, a better name might be *learning objections*.

Take, for example, a sales training class that opens with the objective, “You will learn three ways to close a sale.” The experienced salesperson in the classroom immediately thinks, “Well, I know five ways to close a sale. This is a waste of my time. I object to this whole course.” You’ve now lost that learner for the duration of the class.

What if, instead, the class started with the facilitator saying, “Here are three ways to close a sale. Guess which one was the most successful in our organization last year and why.” Now, the facilitator has the attention of the learners! Instead of rejecting the objective, they are genuinely curious to know the answer.

Other options to defeat learning objections include asking participants to:

- Make a decision.
- Choose a team.
- Solve a problem.
- Safely operate a piece of equipment (physically or virtually).
- Play a game.
- Place a bet.

These and other immediate actions pull learners into the flow of instruction, getting them involved, setting the tone for learning events that follow, and leading to better retention and application of the information to on-the-job tasks.

Actions That Gain Attention

Many educational models—from Robert Gagné’s Nine Events of Instruction to John Keller’s ARCS Model of Motivation (attention, relevance, confidence, and satisfaction)—start with gaining the learner’s attention. You’ve likely heard that the contemporary world of smartphones, bite-sized news clips, and 30-second videos on TikTok and Instagram have led to attention deficits. Some people even claim that goldfish have longer attention spans than humans. (Spoiler alert: They don’t.)

But modern distractions certainly make gaining and holding learners’ attention more difficult, so the action-first approach begins with

immediately asking learners to do something meaningful, setting the tone for the instruction to follow.

Actions That Activate the Senses

We have five primary senses. Delivering instruction focused only on one makes no sense. We don't necessarily learn better with one sense or another; however, the more senses we can use to encode knowledge, the easier it is to recall a learning experience. Mimicking the sights, sounds, smells, and tactile experiences of an actual work environment during a learning event means that learners will have more cues that they can use to recall the content.

Visceral or emotional events (in what academics call the *affective domain*) also aid our recall. As humans, we tend to remember particularly enjoyable and tragic events. As designers, if we focus on enjoyable events, we can leverage positive memories to help learners recall our instruction. In short, don't limit your imagination when designing action-first learning events—activate as many senses as possible to make the learning enjoyable and, therefore, memorable.

Actions That Encourage Critical Thinking

As AI handles more menial tasks, humans may be freed up to handle more of what we do best: critical thinking. We can think about thinking! We can connect dots that don't at first seem to be connected. We can determine the best strategy and direction for learning.

Action-first learning is all about thinking critically by forcing learners to evaluate information objectively and fairly, to consider multiple perspectives and solutions, and to analyze complex situations at a deep level. Taking action allows learners to focus on the situation they're in and asks them to critically evaluate what they need to do to be successful.

Carry the Action Orientation Throughout the Entire Learning Process

Keeping a learner's attention is a continuous struggle. Keeping your attention as a reader is a struggle, too. Novelists often try to end each chapter

with a cliffhanger moment to encourage readers to immediately continue to the next chapter. Television shows do the same thing with each episode, and in the streaming era, the next episode often begins before the previous one's credits have finished rolling. Action-first learning follows a similar approach. You should work constantly to keep learners' attention by introducing new situations and methods throughout a course or program (not just at the start) and by including unexpected twists, Easter eggs (hidden, surprising features), and instructional cliffhangers.

End With Active Reflection

There is no learning without reflection, only an experience.

One danger of action-first learning designs is that learners will be so caught up in the action part that they forget about the learning outcomes. This is solved by requiring learners to reflect on their experiences and articulate in writing or verbally how they plan to apply the knowledge and behaviors they have learned on the job or in other situations. Reflection is a powerful learning tool and an integral part of action-first learning.

To sum up, all the elements of this definition of action-first learning are critical to preventing a superficial or haphazard approach. They are broad enough to encompass many kinds of learning designs but specific enough to offer parameters that can help ensure you produce a successful learning event.

The Action-First Learning Framework

The definition of action-first learning is just one part of the Action-First Learning Framework presented in this book. The framework shows how an instructional designer can best craft an action-first learning experience (Figure 1-1). The following sections describe each aspect of the framework in more detail.

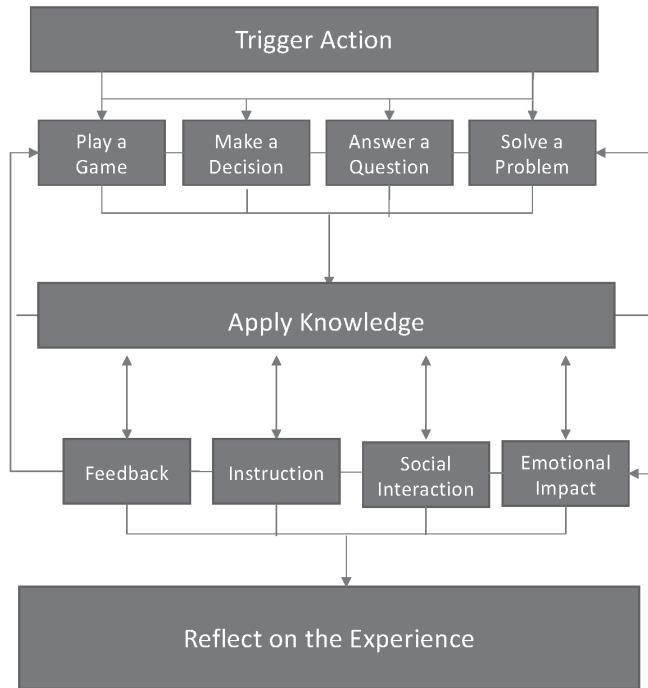


Figure 1-1. The action-first learning framework.

Triggering Action

The Action-First Learning Framework begins with a triggering action—an event or situation that starts the learning process. That trigger could be dealing a set of cards, arranging learners in front of a board game, sending them to an escape room, or asking them to don VR goggles. After the trigger action occurs, the learner then must act. Maybe they'll need to move a token or take a card. They might click on a decision point in a branching scenario, answer a question, solve a puzzle, or look for clues. The point is that the learner is doing something immediately when the instruction begins.

Applying Knowledge

The learner then applies knowledge to the action they are taking. As I mentioned before, this is not action for action's sake—it is part of reaching a desired instructional outcome. The application of knowledge should involve problem solving and nonlinear thinking.

During the process of applying their knowledge, the learner will receive more information and reactions in various formats. The feedback might be as subtle as a character's expression turning from neutral to a frown or as overt as a drawer opening after they enter a combination to unlock it. They may receive instructions, hints, or tips that guide them toward their learning goal, so they don't miss it, and then continue participating in the action-first learning event.

Often the learner will engage with others in an action-first learning activity through a variety of social interactions, cues, and feedback. But even if another person is not present during the activity, the learner in an action-first situation could interact with a character onscreen who is providing social cues.

These social cues, attempts to apply knowledge, and various forms of feedback all contribute to the emotional impact of a situation—an often overlooked but crucial aspect of learning. The process of responding to actions, applying knowledge, and processing feedback, instruction, social interactions, or emotional impact continues until the action-first learning experience ends. However, just because it ends, doesn't mean the experience is over.

Reflecting on the Experience

Action-first learning requires that time be set aside to reflect on the experience. The learner should think about how to:

- Leverage the action-first learning experience for future applications.
- Change their current behaviors.
- Act differently to achieve new results.

The reflection could include journaling, answering a series of questions, or discussing ideas with a fellow learner. This is a powerful tool for learning and an integral part of the action-first learning framework. Without reflection, learning can't take place.

Foundations of Action-First Learning

The Action-First Learning Framework is built upon a theoretical foundation, a rich body of research illustrating the benefits of actively engaging learners, and practical experience.

Theoretical Foundation

The theoretical foundation of action-first learning is primarily the work of pioneering psychologists Jean Piaget (1896–1980) and John Dewey (1859–1952). Jean Piaget, a Swiss psychologist known for studying the cognitive development of children, is considered the father of the theory of *constructionism*, an important component of the Action-First Learning Framework. Piaget's research had a profound influence on our understanding of how adults learn and process knowledge. He suggested that we actively construct our knowledge of the world as we reflect on our ideas and experiences. We all build representations of reality and continually incorporate new information into our pre-existing knowledge base.

Before Piaget put forth his theories, John Dewey—an American philosopher, psychologist, and education reformer—advocated for hands-on learning and experiential education. Dewey believed that instruction should foster deep, meaningful learning through active engagement, problem solving, and social interaction.

Finally, as I mentioned earlier, Reg Revans (with his 23 criteria for action learning) was another early inspiration for my ideas about action-first learning.

Modern Research

Hundreds of scientific studies have demonstrated the powerful benefits of actively engaging learners during the instructional process. In STEM (science, technology, engineering, and math) fields, a meta-analysis (study of studies) of 225 studies of undergraduate courses showed that active learning not only increased examination scores, but students in classes dominated by traditional lectures were more likely to fail than those in classes using active learning techniques (Freeman et al. 2014). A meta-analysis of 104 studies in the humanities came up with similar conclusions, finding

“sound scientific evidence for the overall superiority of active instruction for learning achievements. . . . Institutions and policymakers should encourage their instructors to adopt active teaching methods” (Kozanitis and Nenciovici 2022).

One study examining both active learning and a constructivist approach to learning concluded that the “constructivist learning approach” and ‘active learning’ have a large effect on environmental education compared to ‘traditional learning.’ Therefore, these methods and techniques should be frequently used in environmental education classes, projects, and activities” (Arik and Yilmaz 2020). Although the study was limited to the environmental education field, the data pattern is clear: Active learning experiences—in which learners build their own knowledge and actively participate in the instructional process—lead to gains far beyond those available with passive learning techniques.

Critiques of Active Learning

I’m not arguing for tossing out all lectures or other passive approaches to instruction. We don’t need to create a false dichotomy between “bad” lectures and “good” active learning techniques. However, some scholars who advocate for traditional approaches also question the validity of studies looking at active learning techniques. For example, one group of educational psychologists declared they could not “determine the extent to which active learning interventions are effective and if there are any boundary conditions for when active learning interventions are or are not effective” (Martella et al. 2023).

Active learning initiatives work in many situations, but how and why is unknown. More research is needed to determine the optimal mix of passive and active learning techniques. However, we can’t wait for the research to be completed and tied up in a nice, neat bow. Research isn’t static; it evolves as new theories and research methods are discovered. Practitioners can’t wait for the absolute truth; it may never be found.

What we know now from the research is that active learning techniques lead to positive learning results. And, in my experience, instructional designers lean too far in favor of passive strategies. The bottom

line is that we need more action-first learning, and it must be applied correctly and wisely.

Experience-Based Evidence

From practical experience, organizations of all types are espousing the benefits of active learning. They have seen the results, energy, and motivation of learners exposed to an approach fully aligned with action-first learning design. According to one edX senior learning designer, “Active learning is a crucial component in developing skills and being able to do things rather than just know them or know about them” (França 2020).

The venerable business publication *Forbes* published an article in 2019 saying, “With active learning, outcomes are better, and the knowledge is retained so that a worker can access, adapt, and apply [it] repeatedly and build upon it” (Agarwal 2019). The article mentions three benefits of active learning that may be even more relevant today:

1. **Transferable learning.** Action-first learning with built-in time for reflection provides a clear path to transferability across contexts and situations.
2. **Tangible skill building.** Working on solving a problem or overcoming a challenge builds skills more effectively than passively absorbing content.
3. **Opportunities to practice.** Action-first learning provides plenty of opportunities to practice, and while practice doesn’t make perfect, it makes learning permanent. Practice helps solidify what the learner is supposed to understand and allows them to test their abilities as they apply the new skill or knowledge. When successful, learners gain confidence to apply their new skills or knowledge in a variety of other situations.

Caution: Resistance Ahead

Note: Research has found that learners in active-learning classrooms believe they learn less, even when they are, in fact, learning more (Deslauriers et al. 2019). This problem can create resistance if learners think they are wasting their time. As L&D professionals, we have to work to overcome

this mistaken understanding of action-first learning by preparing learners for the possibility that it feels like their learning is not paying off.

Slowing down the learning process and making it feel a little more difficult is known as adding *desirable difficulties*. This may seem counterintuitive, but by creating a difficulty or struggle during the learning process, you can improve learning outcomes. By making learning purposefully difficult in key areas, an instructional designer can improve long-term retention and use of the learning material (Allen 2024).

We don't want to create difficulties just to create difficulties, but when properly implemented, desirable difficulties can be an effective tool for long-term retention and application.

Meaningful Action-First Learning Experiences

Crafting a worthwhile learning experience requires infusing two levels of meaning and purpose into the action-first learning design. The first is that outcomes need to *result in behavior changes* that the organization values. Second, learning experiences need to be meaningful *to employees themselves*. Employees should want to undertake the experience and value the outcomes on both a personal and professional level.

In today's AI-driven, hyperconnected world, employee attention, priorities, and engagement can be fragmented. Combining learning with a bit of fun, interactivity, and memorable experiences can make all the difference for improving meaning and purpose. If we don't make an effort to capture learners' emotional or affective domain, our desired outcomes can be in danger.

Implications and Importance of the Action-First Learning Framework

To achieve success, action-first learning designs need to go beyond the gamification of the operational outcomes we desire. They need to target individual behaviors that lead to those desired outcomes while motivating employees to actively participate. Motivating and engaging employees

still requires that an aspect of the design is devoted to those goals. Careful implementation of the learning designs discussed in this book can provide engagement, motivation, and desired organizational outcomes.

Action-First Learning Designs

One powerful way to add meaning at the organizational and individual levels is to deploy action-first learning designs. In the following chapters, we'll explore how to create these designs for behaviorally focused, authentic, action-based learning experiences that are also engaging and fun. The first method we'll explore is card games.

Key Takeaways

Now that you're ready to learn how to create an action-first learning experience, remember these tips:

- Action-first learning gets learners involved early in the learning process, activating their senses, and asking them to think critically about their learning experiences.
- Action-first learning is a philosophical foundation for designing learning experiences rather than a step-by-step methodology. It's based on a body of research demonstrating the value of active engagement instead of the passive consumption of content.
- Action-first learning builds tangible, transferable skills by providing practice opportunities and time for reflection—there is no learning without reflection. It's carried out throughout an instructional experience, not just at the beginning.
- Meaningful learning design requires that both learners and their organization benefit from the learning experience.
- Action-first learning improves long-term retention and application of knowledge, even though people often think they are learning less during an active learning process.
- There is no set action-first learning design. The philosophy allows for many methods that encourage action, engage learners, and require critical thinking and reflection.

EXPLANATION OF THE ACTION-FIRST ACTIVITY

Asking you to develop your own definition of a term before presenting a standard definition is an example of an effective action-first learning technique. The task taps into your prior knowledge and activates your existing mental framework related to the topic. This makes it easier for you to connect new information with what you may already know about the subject. The process not only enhances understanding, motivation, and engagement, but it also aids in the retention of new concepts like, in this case, action-first learning.

The process of comparing the definition you wrote with the definition I provided in the chapter offers an opportunity for critical thinking. When you check your definition against the mine, you make a connection that forces you to think through your own knowledge, speculate about a possible definition, and identify gaps in your understanding as you read the chapter.

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About the Contributors

Jessica Angove is the vice president of experiential learning at Tipping Point Media. She has more than a decade of instructional design expertise, and has dedicated most of her career to crafting innovative and technically advanced training and marketing solutions for the healthcare and life science industries. At Tipping Point Media, Jessica oversees the design and delivery of award-winning, experiential learning solutions.

Anders Gronstedt, PhD, is a pioneer in extended reality training simulations. As president of The Gronstedt Group, he leads the development of high-fidelity simulations that accelerate learning at scale for the world's largest employers, including the US Navy, Walmart, Pfizer, Novartis, Takeda, and Bristol Myers Squibb. Anders, a former marketing professor at the University of Colorado, is a thought leader in the industry and regularly contributes to conferences and publications.

Amy Pape, MSIT, is an instructional designer with 20 years of experience in both the public and private sectors. She began designing for greater accessibility as a public sector contractor, creating digital learning materials for warfighters and civilians to meet Level AA Section 508 compliance. For Amy, accessibility became less of a requirement and more of a foundational principle after seeing how well-aligned accessibility guidelines and good design practices can benefit every learner.

Natalie Roth is a recognized employee engagement and experience expert. As a senior director at Centrical, she equips L&D, HR, and operations leaders of global brands across a variety of sectors—including banking, travel, healthcare, and consumer technology—with innovative solutions to elevate the frontline employee experience. These technologies result in measurable improvements in employee engagement and performance.

Kevin Thorn, EdD, is an award-winning e-learning designer and developer, and owner of NuggetHead Studioz. Kevin integrates technology, instructional design, illustration, graphic design, animation, video, and educational comics to create innovative learning solutions. Kevin is also a well-known speaker and trainer in visual communication and design workflows.

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About the Author



Karl M. Kapp, EdD, is a professor of instructional design and technology at Commonwealth University in Bloomsburg, Pennsylvania, where he teaches classes related to interactive learning, game design, and gamification. Karl serves as the director of Bloomsburg's Institute for Interactive Technologies, which works with government agencies, nonprofit organizations, and private corporations to create interactive, engaging, and meaningful instruction. His work explores the research, theoretical foundations, and application of research to the design of engaging, meaningful instruction that changes behaviors and makes a difference.

Karl has written 10 books and literally wrote the book on the gamification of learning and instruction: *The Gamification of Learning and Instruction*. He co-authored its companion, *The Gamification of Learning and Instruction Fieldbook*, as well as the well-known book *Play to Learn: Everything You Need to Know About Designing Effective Learning Games* (which he co-wrote with Sharon Boller).

Karl has created a dozen LinkedIn Learning courses, and he's been a TEDx speaker. He created the popular YouTube video series *The Unofficial, Unauthorized History of Learning Games*, in which he explores the history, development process, and outcomes of games designed to help others learn. He scratches below the surface and digs up "lessons learned" that you can apply to your own development of learning games.

He is a frequent international keynote speaker, headlining conferences in Brazil, Belgium, China, England, and France. Karl has won numerous awards, including being named one of LinkedIn's Top Voices in Education and a Guild Master by the Learning Guild. He's also received the ATD Distinguished Contribution to Talent Development Award.

Karl's passion is to help others create instruction that make a difference. Subscribe to his LinkedIn Learning newsletter *L&D Easter Eggs* or explore more of what Karl is up to on his website, karlkapp.com.

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