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About the Training Basics Series

ATD’s Training Basics series recognizes and, in some ways, celebrates the fast-paced, ever-changing reality of organizations today. Jobs, roles, and expectations change quickly. One day you might be a network administrator or a process line manager, and the next day you might be asked to train 50 employees in basic computer skills or to instruct line workers in quality processes.

Where do you turn for help? The ATD Training Basics series is designed to be your one-stop solution. The series takes a minimalist approach to your learning curve dilemma and presents only the information you need to be successful. Each book in the series guides you through key aspects of training: giving presentations, making the transition to the role of trainer, designing and delivering training, and evaluating training. The books in the series also include some advanced skills, such as performance and basic business proficiencies.

The ATD Training Basics series is the perfect tool for training and performance professionals looking for easy-to-understand materials that will prepare nontrainers to take on a training role. In addition, this series is the consummate reference tool for any trainer’s bookshelf and a quick way to hone your existing skills.
Preface

*Training Design Basics* explains how to design and develop training programs, primarily those programs intended for the face-to-face or virtual classroom. It also provides guidance for designing and developing self-study training programs, such as online tutorials and workbooks.

Many training design books focus almost exclusively on the analysis and evaluation phases of creating training programs. This one gives as much attention to the design, development, and implementation phases, exploring issues such as how to structure a program (including the parts of every program that would not appear in an outline), choose an instructional strategy, determine which materials you need to develop (such as student and instructor guides for classroom courses), follow clear writing and visual design guidelines for these materials, and conduct a review to ensure that the draft program is likely to achieve its objectives.

This book also focuses on designing and developing these programs in the real world, in which trainers make do with limited time, funds, and other resources. Yes, trainers have to analyze needs and write objectives. After all, trainers need to know what they are training and what the resulting program should accomplish. But trainers often have limited time to get this information and some of the key sources of information are not always available. So this book suggests ways to adjust the effort of gathering and assessing information about a project, a process called *analysis*, to the realities in which trainers work.

Similarly, although tutorials and other forms of instruction receive much attention in the training press, the majority of training still takes place in the classroom. Therefore, this book focuses primarily on designing and developing classroom programs, while also addressing the design and development of technology-delivered programs.
Finally, after designing and developing training programs, many trainers are responsible for launching and running their programs. This book explores these tasks, too, especially as they relate to administering, marketing, and supporting training programs.

**Who Should Read This Book**

*Training Design Basics* guides people who have never designed a training program through their first project. It is intended for new course developers and instructors; subject matter experts (SMEs) thrust into training roles; and other nontrainers who find themselves responsible for designing and developing training programs.

**How This Book Is Organized**

Chapter 1 “The Basics of Designing Training Programs” introduces issues to consider when designing training programs, such as the general concepts of learning (and its distinction from information sharing), human performance improvement, and adult learning.

Chapter 2 “The Basics of Planning a Training Project” provides an overview of the process for designing training programs and suggests ways to answer the question “how much time is needed to design and develop a training program?” before you start developing it. This chapter also describes the roles that people play in a training project and suggests ways to effectively work with sponsors.

Chapter 3 “The Basic Information Needed to Start a Project” describes the first part of the analysis phase of instructional design: gathering information. This chapter identifies the information needed to design a training project and why you need that information, and offers suggestions on how to get that information when you have a tight schedule.

Chapter 4 “The Basic Instructional Objective” describes the second part of the analysis phase of instructional design: defining requirements. This chapter explains how to concretely state the goals of a training program and how to assess whether learners have achieved those goals (a step you perform before beginning to design programs).

Chapter 5 “The Basics of Organizing Training Programs” explains the general structure of a program, and how to divide content into units. This chapter delves into the most popular formats (live, self-study) and communication media (classroom, computer) for training programs.

Chapter 6 “The Basics of Choosing an Instructional Strategy” explores a variety of ways to present instructional material so that it engages learners and they retain it.
Chapter 7 “The Basics of Developing Instructional Materials” identifies the types of materials you must develop for training programs, including student materials, slides, and instructor’s notes for classroom and self-study courses.

Chapter 8 “The Basics of Preparing and Producing Instructional Materials” describes the guidelines for writing and designing these instructional materials, as well as considerations for producing them.

Chapter 9 “The Basic Quality Checks for Training Programs” explains how to conduct reviews and pilot tests to ensure the accuracy and effectiveness of instructional materials before you make them available to others.

Chapter 10 “The Basics of Administering Training Programs” clarifies the responsibilities of course designers and developers after a course goes public.

Each chapter opens with a quick access guide—What’s Inside This Chapter—to introduce you to the contents of the chapter. Use this section to identify the information it contains and, if you wish, skip ahead to the material most useful to you.

The final section of each chapter—Getting It Done—offers you a chance to practice some of the concepts discussed in the chapter and provides closing tips and pointers to help you apply what you have learned.

This book strives to make it as easy as possible for you to understand and apply its lessons. Icons throughout the book help you identify key points to retain.

**Basic Rules**
These rules cut to the chase. They are unequivocal and important concepts for facilitators.

**Noted**
This icon is used to give you more detail or explanation about a concept or a principle. It is also occasionally used for a short but productive tangent.

**Think About This**
These are helpful tips to help you prepare for facilitation or during facilitation.
What’s New in This Edition?

Although the overall structure and basic approach to designing training programs described in this second edition of *Training Design Basics* has remained the same, the book has been updated throughout to reflect changes in training practice since the publication of the first edition. The major changes include:

- The book now addresses live virtual classes and online tutorials, in addition to face-to-face classes and self-study courses. The previous edition only discussed face-to-face classes and workbooks.
- Most of the chapters describe the design of entirely new training programs under the best possible conditions for practice. But this book acknowledges that in many instances the people designing and developing training programs work under more stringent conditions or on revisions to existing programs. Each chapter includes suggestions for adjusting design practices in these situations.
- Chapter 3 now presents a substantially changed process for analysis, clarified through years of use in the classroom and influenced by changes in the industry practice.
- Chapter 5 now includes more-current suggestions for choosing the format and communication medium of a training program and for structuring the program.
- Chapter 6 now focuses almost exclusively on choosing an instructional strategy, and explains how to formally prepare design plans for review. The information on writing materials for administering activities and opening and closing training programs now appears in chapters 7 and 10.
- Chapter 8 now addresses production for online programs, including slidecasts.

Acknowledgments

This book reflects the influences of many people. First, I would like to thank some of my current and former colleagues and collaborators: Ann-Louise Davidson, for her always fresh and frank perspective on instructional design; Patrick Devey, who worked with me to identify scores of pages of practical issues affecting the design and development of instructional programs; Margaret Driscoll, for engaging in countless conversations about the nature and role of training in the mobile and digital world and for always reminding me about the role of philosophy, theory, and mental models in this work; Louise Grummit, who painstakingly worked through the intricacies of training and instructional design competencies with me; Karen Herland, Barbara
Komorowski, and David Price, all of whom had the courage to edit my teaching practices and, in the process, provided a new and improved perspective on teaching; and Patti Shank, who shares my passion for practice-based research.

Second, I would like to thank the team at the Association for Talent Development (ATD) for more than a decade of patience and support with publishing ventures, conference presentations, workshops, and academic programs. A special shout-out to Justin Brusino, who shepherded this project through the production cycle, and Jack Harlow, who edited the manuscript with a special sensitivity to both its purpose and my hypersensitivity to language. I would also like to thank former ATD staff members, Juana Llorens, who secured the contract for this second edition; and Mark Morrow, who edited the first edition in 2003. I developed a new appreciation for Mark’s work when basing this edition on his edited files from the first one.

Most of all, I would like to thank my partner, Marco Manrique, who once again sacrificed evenings and weekends so I could finish another book. Without that quiet understanding and support, I would not have completed this revision.
What’s Inside This Chapter

This chapter introduces the concept of design for training and provides a foundation of concepts that guide the training process. It addresses:

- What is “design” for training?
- The basic principles that guide course designers: the essential nature of training, human performance improvement, and seven “must-follow” principles of adult learning.
- The basic steps involved in designing courses, called ADDIE.

An activity at the end of this chapter helps assess the extent to which you have begun to integrate these foundations into your approach to training.
What Is Design for Training?

A request for training is more than a request for an event or a set of materials. It is a request to help a designated group of workers build a particular set of skills. Learning the skills identified in the request often requires developing related skills and knowledge. And applying those skills on the job often depends on deploying certain motivating factors in the work environment and removing anticipated roadblocks.

To address these challenges, trainers invest substantial effort in designing and developing courses or programs—as many as 40 hours of preparation for each hour of live classroom instruction and up to 12 times that for a self-study course. Before developing a program, trainers spend considerable time defining its goals, identifying the intended learners, and clarifying the context in which learners will use the skills gained in the program. After developing it, trainers test the program to make sure that it is most likely to help learners develop the intended skills.

The framework for clarifying a training problem, defining the intended outcomes, determining how to present the instructional material to learners to achieve those outcomes, developing the training program according to these designs, launching and running—or implementing—the program, and evaluating its effectiveness is called the *instructional design process*. Trainers use the process to prepare all types of programs—those delivered in physical and virtual classrooms, as well as self-study courses like workbooks and online tutorials. Trainers call this process *design* because it solves a problem, and design is fundamentally a problem-solving process.

Basic Principles of Training Design

Training design is guided by certain principles: the essential nature of training; the key principles of human performance improvement; and the must-follow principles of adult learning. The following sections explore each of these principles.

The Essential Nature of Training

With the Internet, people have access to free online courses from Harvard, MIT, and many other universities; museum collections from the Metropolitan Museum of Art, the British Museum, and the Smithsonian Institution; blogs from people all over the world sharing their hard-learned advice; encyclopedic information from Wikipedia; and YouTube videos, ranging from how to tie a tie to how to determine the confidence levels in the statistical analysis of sales data. People are thus surrounded by learning opportunities.

Or are they?
Learning is a more complex activity than merely providing information to people and hoping they figure out what to do with it. Cognitive psychology—the branch of psychology that studies the processes of the brain—studies learning in depth. Cognitive psychologists define learning as a change in behavior and thought, and they determine whether learning occurred by observing if the person who was expected to change behaviors and thought processes—the learner—has actually adopted the designated behaviors and thought processes.

Trainers usually focus on developing complex behaviors and thought processes—or skills—that consist of many contributing behaviors, such as recommending products to prospective customers. For example, to recommend products to a prospective customer, a sales representative must first learn the needs of the customer and then identify several possible products that might address the customer’s needs.

Basic Rule 1

The purpose of training is to develop the competencies and skills of learners. Developing competencies and skills involves more than merely distributing information to learners. It involves developing particular behaviors and thought processes and verifying that learners have mastered them.

Sometimes trainers focus on changing physical behaviors, such as following a new process for changing tires on a car, which others can easily observe. These skills are called psychomotor skills. Sometimes trainers focus on changing intellectual behaviors and thought processes, such as following a new methodology for determining creditworthiness. These skills are called cognitive skills. And sometimes trainers focus on changing attitudes, such as attitudes toward diversity. These skills are called affective skills. Although feasible, observing affective skills admittedly poses challenges.

In addition to explaining concepts and describing and demonstrating processes, developing skills also involves providing learners with opportunities to practice skills, receive feedback on their performance, and continue practicing until they master the skills. Similarly, developing skills also includes verifying that learners actually acquired the skills. The availability of practice, feedback, and assessment distinguishes formal training programs from other informational materials that purport to teach.
Three Key Principles of Improving Human Performance

More than merely teaching people to perform tasks and develop skills, training programs are a piece of a larger effort to help organizations develop their staff—or talent—and achieve meaningful goals. These programs help organizations build the competencies of workers and help groups perform their assigned responsibilities so that organizations can achieve their goals most effectively and efficiently.

Human performance improvement (HPI) is a framework that places training and talent development efforts within broader efforts to help organizations achieve their goals. It notes that many people working in a variety of positions help organizations achieve meaningful goals. HPI provides a means for determining the role (if any) that training might play in addressing the issues facing an organization. Three principles of HPI play a profound role in training design.

Think About This

You might often hear several words used interchangeably to refer to training, but note that each has a precise definition.

- **Training** refers to the development of skills, competencies, and knowledge for immediate use (typically within the next six months). Therefore, training typically focuses on work-related skills.
- **Education** refers to the development of skills, knowledge, and competencies for long-term use. Although some learners might apply their education immediately, instructors also hope that learners retain the material for many years. For example, trainers might provide leadership development programs to those currently in junior positions in hopes of developing a new generation of senior professionals.
- **Learning** refers to an activity performed by the person who receives training or education, and is observed as a change in behavior. Although trainers facilitate learning, only the participants can do the learning.

1. **Training Programs Must Address Meaningful Goals**

   Trainers work with sponsors (the internal or external parties that commission the design of training programs) to establish meaningful goals for the training program. They limit instructional material to that which helps learners achieve the goals. And they determine the success of the program by its ability to achieve the established goals, as well as the larger organizational goals to which the program contributes. If the purpose of the training program is to develop the competence of workers to perform their job, trainers must first
define the overall competence desired, next identify the specific skills that contribute to the competence desired, and then devise a means of assessing whether learners have achieved the competence desired.

2. Training Programs Must Address the Gap Between Current and Desired Performance

Many sponsors request training programs because they’ve observed an issue in their environment, such as difficulties with certain types of sales, errors in the operations of certain services, or inadequate adherence to safety standards. They attribute the issue to a lack of competence and skill on the part of workers, and thus believe that training programs could help resolve the issue.

In other words, they perceive a disparity between current and desired performance—a disparity called the *performance gap*. Although the gap itself is usually self-evident, the reasons that it exists usually are not. The cause of the gap is best uncovered through an analysis of the situation.

3. Training Programs Alone Might Not Fill the Performance Gap

Training might help bridge the performance gap, but sometimes it is not enough. Why? Well, training addresses just one of the three drivers of performance: skills and knowledge. In some instances, workers have the skills and knowledge to perform a task, but still do not perform it effectively.

Training doesn’t address the other two drivers of performance: tools and resources (the materials used and processes followed to perform the task) and motivation (the interest in performing the task effectively and efficiently). If the performance gap results from a lack of skills and knowledge, training can address it. But if the performance gap results from a lack of resources, a poorly defined or planned process, or motivational issues, training is not likely to be effective in bridging the performance gap.

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**Basic Rule 2**

Training is a goal-focused activity. For the individuals who participate in it, training can help them build competencies and skills needed to succeed on the job. For the organizations who sponsor it, training can help organizations achieve their goals.
This book explains how to design training courses and exclusively focuses on performance gaps resulting from a lack of skills and knowledge. Despite that singular focus, keep in mind that training might not always be the solution to the issues driving a request for a training program.

**Seven Must-Follow Principles of Adult Learning**

Adult learners should be taught differently than school children. That’s because adults enter training with experience, with preconceived notions about the subject and with needs emerging from their responsibilities as workers, parents, and citizens—characteristics unique to adult learners. So, when designing and presenting training programs, consider the following principles to treat adult learners like adults.

**Adult Learning Is Andragogy, Not Pedagogy**

*Andragogy*, a term popularized by Malcolm Knowles, refers to the art and science of teaching adults (Knowles 1973; Knowles, Holton, and Swanson 2011). Andragogy encompasses principles that instructional designers must address when preparing training programs for adults. In contrast, *pedagogy* refers to the art and science of teaching children, whose learning needs differ significantly from those of adults.

**Adult Learners Are Pressed for Time**

Adults squeeze in learning among demanding jobs, family responsibilities, and community commitments. Even when highly motivated to learn, the call of life limits the time that many adults can invest in learning. In practical terms, this suggests that you should limit the amount of outside-of-class work because learners might not have time to even start it.

**Adult Learners Are Goal Oriented**

Adults primarily participate in learning programs to achieve a particular goal. In the context of training, the goal is typically work related. The goal might have immediate benefits, such as learning to use a work-related software application. Or the goal might have longer-term implications, such as mastering the essentials of planning projects to become qualified for a project management role. So begin work on training programs by asking how learners can benefit from it.
Adult Learners Bring Previous Knowledge and Experience
Adult learners bring a lifetime of knowledge and experience to each training program. When that knowledge and experience directly relates to the new material in the program, linking the two can create a powerful and relevant learning experience. Learners might already know some or all of the content that the program addresses. To avoid wasting their time, training designers need to carefully assess what learners already know and let them skip familiar material or explain why reviewing the material benefits learners.

In some instances, content in the training program may conflict with previous knowledge and experience, and training designers may thus need to help learners unlearn old behaviors and thought processes so that they can adopt the new ones promoted in the program.

Adult Learners Have a Finite Capacity for Information
Although many training programs tackle complex topics, most learners are primarily interested in aspects of the content that directly affect them, which in many cases is just a small part of the program. But because trainers often have so little time with learners, they try to cram in as much content as they can—to the detriment of learners. In addition, the human brain can only process a limited amount of information at a time, placing some practical limitations on the quantity of material a learner can digest in a program. Design practices advocated by this book—especially establishing objectives (see chapter 4) and adopting the minimalist approach (see chapters 5 and 6)—help designers work within these human limitations.

Adult Learners Go Through Several Phases When Developing Competence in Their Jobs
During the first six weeks to three months on a job, adults are highly motivated to learn. When faced with a new work process or approach, adults are similarly motivated to learn. (What stifles their motivation, at this point, is fear of failure and difficulty of unlearning old habits, an issue called self-efficacy.)

As learners become more competent, motivation to learn wanes unless a specific need arises. The challenge for training designers is identifying the development level of learners as their expertise builds and then adjusting the content to match that level.
True Learning Happens When Adults Successfully Integrate—or Transfer—the Skills Into Their Daily Routines

Although adults develop new competencies and skills through formal training programs, the only way those new competencies and skills can meaningfully affect their lives is when learners actually apply them. When designing effective training programs, trainers consider not only how training is delivered in the classroom environment but also how it transfers to the job.

Think About This

Most people go through several stages of motivation and development as they build their competency levels (Carliner 2002):

- **Unaware stage**: At this stage, learners are unfamiliar with the issue addressed by the training program, have little interest in the issue, or both. The challenge at this stage is motivating learners to proceed with the learning process.

- **Novice stage**: At this stage, learners’ primary learning goal is getting started—learning enough material to proficiently handle the routine tasks. Learners only need how-to instruction, practice opportunities, and feedback on first attempts at practice at this point. Don’t overburden learners with too much material or overwhelm them with unnecessary choices. For example, if teaching learners how to cut and paste text in a word processor, just teach the easiest way to do so, not five ways to do so. Each additional way only confuses learners.

- **Feeling arrogant stage**: At this stage, learners have mastered routine tasks and gained confidence, and now they want to learn how to handle the routine tasks more efficiently as well as less common tasks. Learners still want instruction at this point, but some seek less guidance and practice. So just tell learners what to do; let them choose whether they want to practice.

- **Feeling humble stage**: At this stage, learners have mastered most of the material in their area of expertise and are aware of the limits of their knowledge. Learning usually happens informally, one expert to another. In these situations, learners benefit from models and frameworks for approaching challenges, and appreciate discussion groups and other, less formal learning programs in which they can converse with experts to explore answers to their specific questions.

The ADDIE Approach to Instructional Design

With the principles of HPI and andragogy guiding them, trainers design programs. When creating training programs, training designers and developers follow five broad activities—analysis,
design, development, implementation, and evaluation—called ADDIE. The following sections introduce each of these activities.

Basic Rule 3
To best support adult learners in developing new skills and competencies, treat them as individuals. Avoid approaching training as a one-size-fits-all venture. When feasible, adjust training to respond to the individuality of participants.

Analysis
Analysis encompasses the tasks required to clarify the need driving the training request and define the requirements that the training program should achieve.

To clarify the need underlying the request to design and develop a training program, you need to determine what the sponsor of the request hopes to accomplish through the training program—the business need to be addressed and the performance gap to be bridged. You also need to learn about the workers who will participate in the training program—who they are, what they already know, how they feel about their jobs, and the challenges they might experience as they work toward new levels of performance after the program.

In the analysis, you also need to identify any barriers that restrict learners from applying the skills taught in training to their job, as well as more general factors that could affect the design and development of the program, such as the drop-dead due date for the project and the not-to-exceed budget (the maximum the organization sponsoring the training course is willing to invest). Chapter 3 identifies in more detail the information you need to start a training project.

To define the requirements of the training program, you need to write objectives (formal statements of goals) that the program should achieve and prepare evaluations to determine whether learners have achieved those objectives. Writing objectives involves stating the tasks that learners must perform to successfully bridge the performance gap identified earlier. Trainers use specific language to write objectives so that others can assess whether learners have achieved them.
You also need to prepare the evaluations that assess whether learners have achieved the objectives. Test questions emerge directly from the objectives and require that learners meaningfully apply the material. You can then design programs in such a way that they “teach to the test” to ensure that largest number of learners master the objectives. Chapter 4 explains how to write effective objectives and tests.

**Design**

Through design, you determine how to develop the skills identified in the objectives and prepare learners to apply those skills in the ways that the tests assess. Specifically, design involves:

- **Choosing the appropriate intervention for achieving the objectives.** Although this book assumes that training is the appropriate solution to the problem, in the real world, training on its own might not achieve the desired performance. Training only addresses a performance gap that results from a lack of skills and knowledge. Other types of programs—called interventions—address performance gaps from a lack of resources or motivation. As noted earlier, this book focuses on training and does not explore other possible interventions.

- **Choosing the appropriate communication medium.** Course designers and developers can use different communication media to deliver training to learners, including the physical classroom, the live virtual classroom, workbooks, and computers. The general design activities for these media are similar, though some adjustments might be necessary to take advantage of certain unique capabilities of a medium and avoid its pitfalls. Chapter 5 describes the primary media used to deliver training programs and offers some design considerations for each.

- **Structuring the instructional material for the training program.** Structuring the material involves first determining a sequence for presenting content—that is, what comes first and what comes second. In doing so, you consider the general structure of each unit...
so that units have a similar rhythm, divide the content into manageable units, and determine the specific material to cover in each. You also determine whether variations of particular units are needed to address specific groups of learners, such as learners who follow an alternate process when applying the content. Chapter 5 explains how to structure the content.

- **Presenting the instructional material.** After determining the structure of the program, you next choose a strategy for teaching the instructional material. You choose a general strategy for the entire program as well as specific strategies for individual units, such as the classical approach, mastery learning, and discovery learning. As part of choosing a teaching strategy, you also determine the sequence of events needed in each unit to develop the skills identified, such as starting a lesson with an activity or waiting until after an instructor demonstrates a skill before starting an activity. Chapter 6 describes the different techniques available.

**Development**

Development is when you convert design plans to reality. For classroom-based training programs (whether face-to-face or in the live virtual classroom), you develop lesson plans, slides, lecture notes, handouts, and an instructor guide for administering learning activities. You might also create databases and other materials for computer-based exercises, answer keys for question-and-answer exercises, and discussion guides for class discussions. For self-study programs, you develop workbooks or online tutorials that learners can take with little or minimal assistance from another person, as well as readings and guides for tutors. Chapter 7 identifies the types of materials you must develop for training programs. Chapter 8 describes guidelines for writing and designing these materials and offers some considerations for producing them.

In addition, during development you also make sure that the program will achieve its objectives through three types of reviews. Pilot tests with people who represent the intended learners are used to find out which parts of the program work well and which parts need further work. In technical reviews, SMEs verify the accuracy of the instructional materials. In production reviews, editors or fellow trainers review a program as if they were its first learners. Chapter 9 describes these reviews and explains how to prepare for them.

**Implementation**

After developing the materials, you make the training program available to the intended learners. To ensure that learners become aware of it, you need to promote the program. You also need to
provide ways for learners to enroll in the program and provide the online or classroom facilities for doing so. In addition, you need to track the progress of learners and provide assistance when learners need it. Last, you need to record when learners complete programs and then administer evaluations. This process is called implementation.

Although many course designers and developers do not handle many of these tasks, you need to make sure that others properly handle them. Effective implementation is essential to learners mastering the objectives, which in turn helps sponsors achieve the goals established for the training program. Chapter 10 describes the implementation of training programs.

**Evaluation**

Evaluation involves assessing whether the training program achieved its goals. Goals involve people mastering skills in training and then sustaining that mastery over a long period of time. As a result, evaluation is an ongoing process rather than a one-time event.

Within the training community, the most widely used approach to this ongoing process of evaluation was developed by late University of Wisconsin professor and ATD officer, Donald Kirkpatrick. The Kirkpatrick model (1994) considers the effectiveness of training programs at four levels (Table 1-1).

This book primarily addresses Levels 1 and 2. Chapter 4 presents a sample of a satisfaction survey (Level 1) and describes how to develop a criterion-referenced test (Level 2). Other books in this Training Basics series explain in more detail how to evaluate training programs at all four levels of this model.

**Table 1-1. Kirkpatrick’s Four Levels of Evaluation**

<table>
<thead>
<tr>
<th>Level</th>
<th>Name</th>
<th>Issues Assessed at This Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Reaction</td>
<td>Assesses learners’ initial reactions to a training program immediately after the program. Their reactions, in turn, offer insights into learners’ satisfaction with the program. Trainers usually assess satisfaction through a survey, often called a “smile sheet.” Occasionally, trainers use focus groups and similar methods to receive descriptive specific comments (called descriptive or qualitative feedback) on the programs.</td>
</tr>
<tr>
<td>2</td>
<td>Learning</td>
<td>Assesses the extent to which learners achieved the objectives established for the program. Trainers usually assess learning with a criterion-referenced test conducted immediately following the training program. The criteria are the course objectives. The tests usually involve answering questions or participating in a demonstration observed by an instructor.</td>
</tr>
</tbody>
</table>
3  Transfer | Assesses the extent to which learners actually apply the skills learned in a program in everyday work six weeks to six months or longer after completing the program. This assessment is based on the objectives of the program and carried out through observations, surveys, and interviews with co-workers and supervisors. Some organizations assess transfer several times to determine how well learners sustain the use of the skills on the job.

4  Business results | Assesses the impact of the training program on the bottom line of the organization six months to two years after the program is completed (the actual time varies depending on the context of the course).

Source: Kirkpatrick (1994).

Getting It Done
This chapter provides a foundation of knowledge that you can apply when designing and developing training programs. Use Exercise 1-1 to assess your mastery of this foundation and check your responses against the answer key.

Exercise 1-1. Reinforcing the Basic Principles of Design

Fill in the blanks.

1. Design is:

2. Learning is:

3. The purpose of training is:

4. Human performance improvement refers to:

5. The three components of human performance improvement are:

6. Nearly all training is intended for adults, who approach learning differently than children. Name at least three of the seven principles of adult learning described in this chapter.
ADDIE is an acronym for the main steps in designing training programs. What does ADDIE stand for?

A

D

D

I

E

Answers

1. Design is a problem-solving activity and, in terms of training, refers to the framework for analyzing a training problem, defining the intended outcomes, determining how to present the content to learners to achieve those outcomes, developing the training program according to the designs, implementing the program, and evaluating its effectiveness.

2. Learning is a change in behavior and thought. Trainers determine whether learning occurred by observing whether the person who was expected to change behaviors and thought processes—the learner—has actually adopted the designated behaviors and thought processes.

3. The purpose of training is to develop the competencies and skills of learners. Developing competencies and skills involves more than merely distributing information to learners.

4. Human performance improvement (HPI) is a framework that places training and talent development efforts within broader efforts to help organizations achieve their goals. HPI notes that many people working in a variety of positions help organizations achieve meaningful goals.

5. Three principles guide HPI:
   • All training programs must address meaningful goals. Furthermore, these measurable improvements should offer tangible benefits to the organization sponsoring the training program.
   • Training programs must address the gap between current and desired performance.
   • Training programs alone might not fill the performance gap. They only fill gaps caused by a lack of skills and knowledge. Other causes include a lack of appropriate resources and a lack of motivation.

6. The seven principles of adult learning are:
   • Adult learning is andragogy, not pedagogy.
   • Adult learners are pressed for time.
   • Adult learners are goal oriented.
   • Adult learners bring previous knowledge and experience.
   • Adult learners have a finite capacity for information.
   • Adult learners go through several phases when developing competence in their jobs.
   • True learning happens when adults successfully integrate—or transfer—the skills into their daily routines.

7. ADDIE is an acronym that stands for analysis, design, development, implementation, and evaluation. Specifically, ADDIE involves:
   • Analysis, which refers to the activities performed for clarifying the training problem and defining the objectives the training course should achieve. Analysis involves researching the problem, defining the objectives, and preparing the assessment.
   • Design, through which trainers determine how to present that content. Specifically, design involves choosing the appropriate intervention for achieving the objectives, choosing the communication method to deliver the content (such as a classroom or online), structuring the instructional materials, and choosing an instructional strategy for teaching the material.
   • Development, through which trainers convert design plans into program materials. Specifically, development involves preparing program materials and then testing and reproducing them.
   • Implementation, through which you bring the program to learners. Implementation involves scheduling courses, arranging for ongoing support of learners, and marketing and maintaining courses.
   • Evaluation, which assesses whether the training programs have achieved their objectives. Evaluation occurs at these four levels: (1) reaction, (2) learning, (3) transfer, and (4) business impact.