



Seventh Edition

Employee Training & Development

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Raymond A. Noe

Employee Training and Development

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Seventh Edition

Raymond A. Noe

The Ohio State University





EMPLOYEE TRAINING AND DEVELOPMENT, SEVENTH EDITION

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This book is dedicated to family, friends, colleagues, and all of the current and past hard-working people at McGraw-Hill who have supported and contributed to making seven editions of this book possible.

Preface

Traditionally, training and development were not viewed as activities that could help companies create “value” and successfully deal with competitive challenges. Today, that view has changed. Companies that use innovative training and development practices are likely to report better financial performance than their competitors that do not. Training and development also help a company develop the human capital needed to meet competitive challenges. Many companies now recognize that learning through training, development, and knowledge management helps employees strengthen or increase their skills in order to improve or make new products, generate new and innovative ideas, and provide high-quality customer service. Also, development activities and career management are needed to prepare employees for managerial and leadership positions and to attract, motivate, and retain talented employees at all levels and in all jobs. An emphasis on learning through training, development, and knowledge management is no longer in the category of “nice to do”—they are a “must do” if companies want to gain a competitive advantage and meet employees’ expectations.

Businesses today must compete in the global marketplace, and the diversity of the workforce continues to increase. As a result, companies need to train employees to work with persons from different cultures, both within the United States and abroad. Technologies, such as social media, and tablet computers, such as the iPad, reduce the costs associated with bringing employees to a central location for training. At the same time, the challenge is ensuring that these training methods include the necessary conditions (practice, feedback, self-pacing, etc.) for learning to occur. Through the blended learning approach, companies are seeking the best balance between private, self-paced, technology-based training (such as online learning), and methods that allow interpersonal interaction among trainees (such as classroom instruction or active learning). Employees from the millennial generation are well versed in informal learning, especially through collaboration facilitated by social media such as Facebook and Twitter. Also, their gaming experiences lead them to expect that learning experiences will be fun, multidimensional, challenging, and provide immediate feedback and rewards.

The role of training has broadened beyond training program design. Effective instructional design remains important, but training managers, human resource experts, and trainers are increasingly being asked to create systems to motivate employees to learn, not only in programs but informally on the job; create knowledge; and share that knowledge with other employees in the company. Training has moved from an emphasis on a one-time event to the creation of conditions for learning that can occur through collaboration, online learning, traditional classroom training, or a combination of these methods. There is increased recognition that learning occurs informally, outside the boundaries of a formal training course.

Also, the employee-employer relationship has changed. Due to rapidly changing business environments and competition that can quickly cause profits to shrink and skill needs to change, companies are reluctant to provide job security to employees. At the same time, many employees are job hopping to find more challenging and interesting work or to maximize the value that they can get for their skills in the job market, and not making

a long-term commitment to any company. As a result, both employees and companies are concerned with developing future skills and managing careers. Companies want a workforce that is motivated and productive, has up-to-date skills, and can quickly learn new skills to meet changing customer and marketplace needs. Despite the prevalence of job hopping, companies want to provide a work environment and training and development opportunities that will them the employer of choice for talented employees. Employees want to develop skills that not only are useful for their current jobs, but also are congruent with their personal interests and values. Given the increasing time demands of work, employees are also interested in maintaining balance between work and non work interests.

The chapter coverage of *Employee Training and Development* reflects the traditional as well as the broadening role of training and development in organizations. Chapter One, “Introduction to Employee Training and Development,” covers the role of training and development in companies. Chapter Two, “Strategic Training,” discusses how training practices and the organization of the training function can support business goals. Because companies are interested in reducing costs, the amount of resources allocated to training is likely to be determined by the extent that training and development activities help the company reach business goals. Topics related to designing training programs are covered in Chapters Three through Six. Chapter Three, “Needs Assessment,” discusses how to identify when training is appropriate. Chapter Four, “Learning and Transfer of Training,” addresses the learning process and characteristics of a learning environment. The chapter also emphasizes what should be done in the design of training and the work environment to ensure that training is used on the job. Chapter Five, “Program Design,” provides practical suggestions regarding what can be done to facilitate learning and transfer of training before, during, and after a course or program. The role of knowledge management in facilitating learning and transfer of training is also discussed. Chapter Six, “Training Evaluation,” discusses how to evaluate training programs. Here, the student is introduced to the concepts of identifying cost-effective training, evaluating the return on investment of training and learning, and determining if training outcomes related to learning, behavior, or performance have been reached. Chapters Seven and Eight cover training methods. Chapter Seven, “Traditional Training Methods,” discusses presentational methods (e.g., lecture), hands-on methods (e.g., on-the-job training and behavior modeling), and group methods (e.g., adventure learning). Chapter Eight, “Technology-Based Training Methods,” introduces new technologies that are being used in training. These technology-based training methods include e-learning, mobile learning, social media, simulations, serious games, massive open online courses (MOOCs), virtual worlds, and blended learning. Chapters Seven and Eight both conclude by comparing training methods on the basis of costs, benefits, and learning characteristics.

Chapter Nine, “Employee Development and Career Management,” introduces developmental methods (assessment, relationships, job experiences, and formal courses). In addition, the use of development plans to help employees succeed in their self-directed or protean careers is highlighted. Topics such as succession planning and on boarding are discussed. Chapter Ten, “Social Responsibility: Legal Issues, Managing Diversity, and Career Challenges,” emphasizes the role that training plays in helping companies improve the communities where they are located by increasing the skill level of the workforce, helping provide jobs, and taking actions to help all employees grow and develop, regardless of their personal characteristics or career challenges. The chapter also discusses compliance with laws that affect training and development, training partnerships,

managing diversity, cross-cultural preparation, and how companies can help employees deal with career challenges such as balancing work and life, coping with career breaks such as taking time off for family or required military service, job loss, and retirement. Finally, Chapter Eleven, “The Future of Training and Development,” looks at how training and development might be different ten or twenty years from now.

Employee Training and Development is based on my more than twenty-five years of teaching training and development courses to both graduate and undergraduate students. From this experience, I have realized that managers, consultants, trainers, and faculty working in a variety of disciplines (including education, psychology, business, and industrial relations) have contributed to the research and practice of training and development. As a result, the book is based on research conducted in several disciplines, while offering a practical perspective. The book is appropriate for students in a number of programs. It suits both undergraduate and master’s-level training courses in a variety of disciplines.

DISTINCTIVE FEATURES

This book has several distinctive features. First, my teaching experience has taught me that students become frustrated if they do not see research and theory in practice. As a result, one distinctive feature of the book is that each chapter begins with a real-life vignette of a company practice that relates to the material covered in the chapter. Many examples of company practices are provided throughout the chapters. Each chapter ends with a real-life case and related questions that give students the opportunity to apply the chapter’s content to an actual training or development issue.

A second distinctive feature of the book is its topical coverage. The chapters included in Part Two, “Designing Training,” relate to training design (needs assessment, training methods, learning and transfer of training, and program design and evaluation). Instructional design is still the “meat and potatoes” of training. Part Three, “Training and Development Methods,” covers the more exciting part of training and development—that is, training and development methods. But as the role of managers and trainers broadens, they are increasingly involved in helping all employees grow, develop, and cope with career challenges, as well as preparing high-potential employees for leadership positions. For example, managers and trainers need to understand generational differences in employees’ career needs, career paths, cross-cultural training, diversity, outplacement, and succession planning—topics that fall outside the realm of instructional design. These topics are covered in Part Four, “Social Responsibility and the Future.”

The book begins with a discussion of the context for training and development. Part One includes chapters that cover the economic and workplace factors that are influencing trends in the training profession. One of these trends is that companies are emphasizing learning through formal training and development, knowledge management, and informal learning. In addition, these chapters discuss the need for training, development, and learning to become strategic (i.e., to contribute to business strategy and organizational goals). Why? In successful, effective training, all aspects of training—including training objectives, methods, evaluation, and even who conducts the training—relate to the business strategy. More and more companies are demanding that the training function and training practices support business goals; otherwise, training may be outsourced or face funding cuts. Although students in business schools are exposed to strategic thinking, students in psychology and

education who go on to become trainers need to understand the strategic perspective and how it relates to the organization of the training function and the type of training conducted.

Not only has technology changed the way we live and the way work is performed, but it also has influenced training practice. As a result, one chapter of the book is devoted entirely to the use of technologies for training delivery and instruction, such as online learning, social media, mobile learning, gamification, and virtual worlds.

The book reflects the latest “hot topics” in the area of training and development. Some of the new topics discussed in the book are “flipped classroom,” adaptive training, big data and workforce analytics, learning management systems, competencies, knowledge management, massive open online courses (MOOCs), mobile learning (using smartphones), reverse mentoring iPads and other tablet computers, social media such as blogs, wikis, and social networks, and virtual worlds (such as Second Life) for training. Each chapter contains the most recent academic research findings and company practices.

FEATURES DESIGNED TO AID LEARNING

Employee Training and Development provides several features to aid learning:

1. Each chapter lists objectives that highlight what the student is expected to learn in that chapter.
2. In-text examples and chapter openers feature companies from all industries, including service, manufacturing, retail, and nonprofit organizations.
3. Discussion questions at the end of each chapter help students learn the concepts presented in the chapter and understand potential applications of the material.
4. Important terms and concepts used in training and development are boldfaced in each chapter. Key terms are identified at the end of each chapter. These key terms are important to help the student understand the language of training.
5. Application assignments are useful for the students to put chapter content into practice. Most chapters include assignments that require the student to use the World Wide Web.
6. Cases at the end of each chapter and at the end of each of the four parts of the book help students apply what they have learned to training and development issues faced by actual companies.
7. Name and subject indexes at the end of the book help in finding key people and topics.

WHAT'S NEW IN THE SEVENTH EDITION

I want to personally thank all of you who have adopted this book! Based on the comments of the reviewers of the fifth edition and training research and practice, I have made several improvements. Some important changes in the sixth edition of *Employee Training and Development* stand out:

- Each chapter has been updated to include the most recent research findings and new best company practices. New examples have been added in each chapter's text.
- All the chapter opening vignettes are new. For example, the opening vignette for Chapter Eight highlights how Nissan is using e-learning that includes a virtual classroom, social collaboration, and virtual learning lab for skills practice to its geographically dispersed workforce.

- This edition offers new and expanded coverage of topics related to learning, program design, training methods, evaluation, development, and the future of training. From the learning and program design perspective expanded and new coverage is provided on the 70-20-10 learning model, adaptive training, the importance of stakeholder involvement in needs assessment and program design, the use of boosters, reflection, and discussion to enhance learning, how to design training from a project management perspective, and the use of incentives and badges to motivate and reinforce learning. The use of new and increasingly popular training delivery and instructional methods, including massive open online courses (MOOCs), the flipped classroom, serious games and gamification, and mobile learning, is discussed. From a development and career perspective, this edition provides new and expanded coverage of career paths that are more common today, including horizontal and cross-functional career paths, reverse mentoring, stretch assignments, and using succession planning to develop bench strength. In training evaluation, the fundamentals remain important but there is also an increased interest in and use of big data and workforce analytics to show how learning, training, and development contribute to talent management and the company's "bottom line." As a result, in the evaluation chapter we discuss big data and how companies are using it to answer important questions. Finally, new technologies have the potential to radically alter how and when we learn and substitute performance support for learning. As a result, in the last chapter of the book, we discuss the implications of wearables, artificial intelligence, Tin Can API, and neuroscience research for the future of training and development. The implications of the needs and learning preferences of the multigenerational workforce, especially the millennials, for training and development are discussed throughout the book (e.g., reverse mentoring, increased use of games and social collaboration for learning).
- Each chapter ends with application assignments, including new program design and updated web-based exercises. These assignments are also found on the book's website.
- Each chapter concludes with new or updated brief cases that illustrate a training, development, or learning issue faced by a company. The case questions ask students to consider issues and make recommendations based on the chapter content.
- To help students better understand the connections between topics, the book is organized into four different parts. Part One focuses on the context for training and development and includes a chapter devoted to strategic training. Part Two includes coverage related to the fundamentals of designing training programs. Chapters in Part Two focus on needs assessment, learning theories and transfer of training, program design, and training evaluation. Part Three focuses on training and development methods and includes chapters devoted to traditional training methods, e-learning, and the use of new training technologies such as social media and mobile learning. The chapters in Part Four cover employee development and career management and the role of training and learning in helping companies increase their social responsibility. This includes following laws and regulations that relate to training, as well as managing diversity and helping employees cope with career challenges such as balancing work and life, career breaks, identifying and moving along a career path, preparing for retirement, and coping with job loss. Finally, this part provides a look at the future of training and development.

INSTRUCTOR AND STUDENT RESOURCES

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I take full responsibility for any errors, omissions, or misstatements of fact in this book. However, regardless of your impression of the book, it would not have been this good had it not been for the manuscript reviewers. Special thanks to these people, who provided me with detailed comments that helped improve the seventh edition of the book for students and instructors. These reviewers include

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Raymond A. Noe is the Robert and Anne Hoyt Designated Professor of Management at The Ohio State University. He has taught for more than twenty-five years at Big Ten universities. Before joining the faculty at Ohio State, he was a professor in the Department of Management at Michigan State University and the Industrial Relations Center of the Carlson School of Management, University of Minnesota. He received a B.S. in psychology from The Ohio State University and M.A. and Ph.D. degrees in psychology from Michigan State University. Professor Noe conducts research and teaches all levels of students—from undergraduates to executives—in human resource management, training and development, performance management, and talent management. He has published articles in the *Academy of Management Annals*, *Academy of Management Journal*, *Academy of Management Review*, *Human Resource Development Quarterly*, *Journal of Applied Psychology*, *Journal of Management*, *Journal of Occupational and Organizational Psychology*, *Journal of Vocational Behavior*, and *Personnel Psychology*. Professor Noe is currently on the editorial boards of several journals, including *Journal of Applied Psychology*, *Personnel Psychology*, and *Journal of Management*. He is the lead author of “Learning in the 21st century workplace” recently published in the *Annual Review of Organizational Psychology and Organizational Behavior*. Besides *Employee Training and Development*, he has co-authored two other textbooks: *Fundamentals of Human Resource Management* and *Human Resource Management: Gaining a Competitive Advantage*, both published by McGraw-Hill/Irwin. Professor Noe has received awards for his teaching and research excellence, including the Herbert G. Heneman Distinguished Teaching Award, the Ernest J. McCormick Award for Distinguished Early Career Contribution from the Society for Industrial and Organizational Psychology, and the ASTD Outstanding Research Article of the Year Award. He is also a fellow of the Society of Industrial and Organizational Psychology.

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ORGANIZATION OF THIS BOOK

This book is organized into five parts. Part One focuses on the context for training and development and includes this chapter, which offered a broad perspective on training and helped answer questions such as: What is training? Why is it important? Who is receiving training? How much money is spent on training? How should training be designed? Part One also includes Chapter Two, which discusses the strategic training and development process. In Chapter Two, you will see how a company's business strategy influences training practices and the organization of the training department. Chapters Three through Six make up Part Two. These chapters discuss the fundamentals of training design and address different aspects of the ISD model, the model used to guide the development of training (see Figure 1.1). Chapter Three deals with how to determine training needs. Chapter Four discusses the important issue of learning—specifically, the importance of learning and transfer of training. The chapter emphasizes what we learn, how we learn, and how to create an environment conducive to learning within a training session. The chapter also discusses what needs to be considered for transfer of training, i.e., ensuring that skills emphasized in training are used on the job. Chapter Five provides insights into the specific of how training programs should be designed to facilitate learning and transfer. The chapter covers the importance of room design, learning objectives, selecting and preparing trainers, and course planning for learning, as well as how managers, trainers, learners, and knowledge management can facilitate transfer of training. Chapter Six explains how to evaluate a training program. Part Three focuses on training and development methods. Chapter Seven looks at traditional training methods such as lecture, behavior modeling simulation, and role-play. Chapter Eight examines e-learning and methods that have developed from applications of new technology, for example, web-based training, virtual reality, mobile learning, and social collaboration.

Chapter Nine addresses the important issue of employee development and career management; it discusses four approaches used to develop employee assessments, assignments, relationships, courses, and formal programs. Part Five considers training's role in social responsibility and the future of training and development. Chapter Ten deals with legal issues and diversity. Topics covered include ethics and legal issues, managing diversity, cross-cultural training, and issues relevant to certain employee groups, such as coping with career breaks and melting the "glass ceiling." Chapter Eleven discusses how new technologies may influence training and how its role may change in the future.

Students should be aware of several important features of the book. Each chapter begins with chapter objectives. These objectives (1) highlight what the student should learn from each chapter and (2) preview the topics. Next comes an opening vignette—an example of a company practice related to the chapter topics. Company examples are liberally used throughout each chapter to help students see how theory and research in training are put into practice. Each chapter ends with key terms, discussion questions, application assignments, and a short case. Key terms are related to important concepts emphasized in the chapter. Discussion questions and application assignments can facilitate learning through interacting with other students and actually trying to develop and conduct various training applications. Many application assignments require the use of the web, a valuable source of information on training practices. Each of the parts concludes with a case that highlights a company's training and development practices. These cases include questions asking you to apply what you have learned in the chapters.

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Part One

The Context for Training and Development

Part One focuses on issues related to the context for training and development. Chapter One, “Introduction to Employee Training and Development,” discusses why training and development are important to help companies successfully compete in today’s business environment. The chapter provides an overview of training practices, the training profession, and how to design effective training (a topic that is covered in detail in Part Two, “Training Design”). Chapter Two, “Strategic Training,” discusses the strategic training and development process, organizational characteristics that influence training, various models for organizing the training department, how to brand training and market it to the rest of the company, and the advantages and disadvantages of outsourcing training.

Part One concludes with a case that highlights how Dow Chemicals is using training to cope with competitive challenges, reach business goals, and expand learning beyond the classroom and boardroom.

-
1. Introduction to Employee Training and Development
 2. Strategic Training

Chapter One

Introduction to Employee Training and Development

Objectives

After reading this chapter, you should be able to

1. Discuss the forces influencing the workplace and learning, and explain how training can help companies deal with these forces.
2. Draw a figure or diagram and explain how training, development, informal learning, and knowledge management contribute to business success.
3. Discuss various aspects of the training design process.
4. Describe the amount and types of training occurring in U.S. companies.
5. Discuss the key roles for training professionals.
6. Identify appropriate resources (e.g., journals, websites) for learning about training research and practice.

Forces Affecting the Workplace Make Training a Key Ingredient of Company Success

Customer service, productivity, safety, employee retention and growth, uncertainty in the economy, extending learning beyond the classroom, the use of new technology—these are just some of the issues affecting companies in all industries and sizes and influencing training practices.

The examples presented below show how these concerns have affected companies in several different business sectors and how training has helped them succeed.

Many companies, recognizing that learning goes beyond typical face-to-face classes, are using technology to make it easier for employees in different locations to learn and share knowledge through formal courses, as well as through collaboration. For example, GameStop, the retailer of new and used video games, hardware, entertainment software, and accessories, has 18,000 employees in more than 6,600 locations in the United States, Australia, Canada, New Zealand, and Europe. Who doesn't like to play video games like Super Mario, Borderlands, or DragonBall Xenoverse! Its customers can get games from GameStop that they can't get anywhere

else, and it allows customers to buy, sell, or trade games unlike many of its competitors. GameStop serves a variety of customers, including five-year-olds and their parents who are looking for Nintendo games to adult gamers who want to buy the latest gaming equipment. Most GameStop employees (called game-associates) hold part-time, entry-level jobs, requiring working several shifts during the week. They often leave for other jobs or opportunities such as going back to school. Training helps GameStop successfully deal with turnover by ensuring new employees provide consistent customer service that translates into satisfied customers and return business. Most new employees who join GameStop are expert gamers, have expertise about the technology and trends influencing the gaming market, and were loyal customers. As a result, GameStop's training doesn't focus on teaching employees about video games but instead emphasizes how to interact with customers and understand their gaming needs. Also, the training helps employees become ambassadors for the company by sharing their knowledge and passion for gaming with customers. The LevelUp program is an online program that enables employees to complete training on their own time and at their own pace, scoring points based on achieving different skills and advancing to the next level. Training content varies based on the employees' needs; it allows them to log in and out of training at any time and skip sections they already know. The LevelUp program helps prepare new game-associates as well as provide training for more experienced game-associates who may be more interested in a retail career and want to gain the knowledge and skills necessary to become assistant managers and store managers.

McAfee, part of Intel Security, is the world's largest dedicated security technology company. McAfee protects consumers and businesses from the malware and emerging online threats. Sixty percent of employees use social networking tools that support learning and 50 percent of training content is delivered using self-paced online instruction. McAfee also encourages knowledge sharing. Employees can connect online with potential mentors and mentees based on the personal profiles they create. A career development group helps employees collaborate and share ideas about their personal development. A language learning community is available for employees around the world to talk to each other to improve their language skills.

Blue Cross and Blue Shield of Michigan uses Knowlt and MISource to reach employees at forty different locations. Knowlt includes wikis, web courses, podcasts, discussion boards, and e-learning to provide information on more than eighty business topics. MISource gives claims and customer service employees access to information they need to better serve customers. Scotiabank Group, with operations in more than fifty companies, developed an internal social networking application, FaceForward, which includes user profiles, blogs, wikis, and social bookmarks.

US Airways provides extensive training for flight attendants and pilots. Newly hired flight attendants receive five weeks of training, including an introduction to the aviation industry, and Airbus cabin simulators include "door trainers" to practice opening emergency exits under difficult evacuation conditions, such as total darkness and billowing smoke. Training also includes jumping into a pool and inflating a life raft and helping passengers into and out of a raft. Federal law requires annual classroom safety training for flight attendants, and performance drills every two years. Pilot training includes practicing skills in a simulator that presents many

different scenarios, such as both engines failing, and re-creates the feelings and sounds experienced in flight, including turbulence. Forced landings and water ditchings are taught in the classroom. The payoff for this type of extensive training was most evident in the spectacularly safe landing of US Airways Flight 1549 and its 155 passengers and flight crew in the Hudson River in 2009. Based on their almost automatic responses developed through years of training, flight attendants were able to calm passengers, prepare them for a crash landing, and open doors and inflate life rafts to assist in the orderly but quick exit of the slowly sinking airplane. The cockpit crew followed the training they received in how to cope with engine failure and successfully conducted a water landing.

Sources: Based on M. McGraw, "Staying Power," *Human Resource Executive* (January/February 2015): 39–41; "McAfee. Part of Intel Security," *TD* (October 2014): 98. Training Top 125, *training* (January/February 2011): 54–93. 36; S. McCartney, "Crash Courses for the Crew," *The Wall Street Journal* (January 27, 2009): D1, D8.

INTRODUCTION

The examples discussed in the chapter opener illustrate how training can contribute to companies' competitiveness. **Competitiveness** refers to a company's ability to maintain and gain market share in an industry. Although they are different types of businesses, these four companies have training practices that have helped them gain a **competitive advantage** in their markets. That is, the training practices have helped them grow the business and improve customer service by providing employees with the knowledge and skills they need to be successful.

Companies are experiencing great change due to new technologies, rapid development of knowledge, globalization of business, and development of e-commerce. Also, companies have to take steps to attract, retain, and motivate their workforces. Training is not a luxury; it is a necessity if companies are to participate in the global and electronic marketplaces by offering high-quality products and services. Training prepares employees to use new technologies, function in new work systems such as virtual teams, and communicate and cooperate with peers or customers who may be from different cultural backgrounds.

Human resource management refers to the policies, practices, and systems that influence employees' behavior, attitudes, and performance. Human resource practices play a key role in attracting, motivating, rewarding, and retaining employees. Other human resource management practices include recruiting employees, selecting employees, designing work, compensating employees, and developing good labor and employee relations. Chapter Two, "Strategic Training," details the importance placed on training in comparison to other human resource management practices. To be effective, training must play a strategic role in supporting the business.

Human resource management is one of several important functions in most companies. Other functions include accounting and finance, production and operations, research and development, and marketing. Keep in mind that although human resource management practices (such as training) can help companies gain a competitive advantage, the company needs to produce a product or provide a service that customers value. Without the

financial resources and physical resources (e.g., equipment) needed to produce products or provide services, the company will not survive.

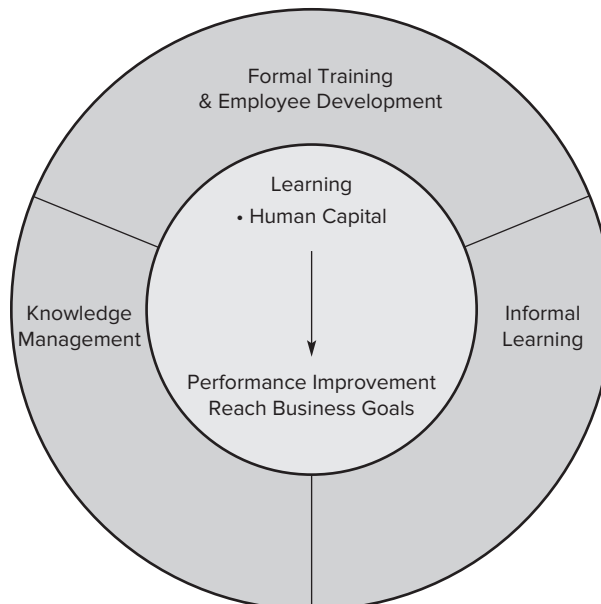
This chapter begins by defining training and development and discussing how the training function has evolved. Next, the forces that are shaping the workplace and learning are addressed. These forces influence the company's ability to successfully meet stakeholders' needs. The term **stakeholders** refers to shareholders, the community, customers, employees, and all the other parties that have an interest in seeing that the company succeeds. The discussion of the forces shaping the workplace (including technology, globalization, and attracting and winning talent) highlights the role of training in helping companies gain a competitive advantage.

The second part of the chapter focuses on current trends in the training area. This section also introduces you to the trainer's role in a business and how the training function is organized. This section should help you understand current training practices, the types of jobs that trainers may perform, and the competencies needed to be a successful trainer (or, if you are a manager, to identify a successful trainer). The chapter concludes with an overview of the topics covered in the book.

TRAINING AND DEVELOPMENT: KEY COMPONENTS OF LEARNING

Our focus in this book is to help you understand the role of training and development in today's organizations. To do this, it is important for you to understand what training and development means in the broader business context. Figure 1.1 shows the role of training and development for the business. The overall goal of training and development is learning. **Learning** refers to employees acquiring knowledge, skills, competencies,

FIGURE 1.1
The Business
Role of
Training and
Development



attitudes, or behaviors. But the focus of training and development is not just on employees learning for its own sake. Today, merely offering training programs is not enough to get support and funding from executives and to establish the credibility of the training and development function to managers and employees. Learning needs to demonstrate how it contributes to the company's competitive advantage through improving employee performance, supporting the business strategy (such as growing the business), and contributing positively to business outcomes such as quality, productivity, development of new products, and retaining key employees. From a company's perspective, what employees learn contributes to the development of intangible assets such as human capital. **Human capital** refers to knowledge (know what), advanced skills (know how), system understanding and creativity (know why), and motivation to deliver high-quality products and services (care why).¹ Human capital may be more valuable than physical capital (equipment or technology) or financial capital (monetary assets, cash) for providing a company with an advantage over its competitors, because it is difficult to imitate or purchase and it is unique to the company.

There are a number of different ways that learning occurs in a company. They are represented on the outside of the circle in Figure 1.1. **Training** refers to a planned effort by a company to facilitate learning of job-related competencies, knowledge, skills, and behaviors by employees. The goal of training is for employees to master the knowledge, skills, and behaviors emphasized in training and apply them to their day-to-day activities. Traditionally, companies have relied on formal training through a course, program, or "event" to teach employees the knowledge, skills, and behaviors they need to successfully perform their job. Development is similar to training, except that it tends to be more future-focused. **Development** refers to training as well as formal education, job experiences, relationship, and assessments of personality, skills, and abilities that help employees prepare for future jobs or positions. We will discuss development in more detail in Chapter Nine, "Employee Development and Careers." **Formal training and development** refers to training and development programs, courses, and events that are developed and organized by the company. Typically, employees are required to attend or complete these programs, which can include face-to-face training programs (such as instructor-led courses) as well as online programs. As you will see later in the chapter, U.S. companies invest billions of dollars in formal training.

Informal learning is also important for facilitating the development of human capital.² **Informal learning** refers to learning that is learner initiated, involves action and doing, is motivated by an intent to develop, and does not occur in a formal learning setting.³ Informal learning occurs without a trainer or instructor, and its breadth, depth, and timing is controlled by the employee. It occurs on an as-needed basis and may involve an employee learning either alone or through face-to-face or technology-aided social interactions. Informal learning can occur through many different ways, including casual unplanned interactions with peers, e-mail, informal mentoring, or company-developed or publically available social networking websites such as Twitter or Facebook. The application of social media from a marketing strategy to a learning strategy and the availability of Web 2.0 technologies such as social networks, microblogs, and wikis allow employees easy access to social learning or learning through collaboration and sharing with one or two or more people.⁴ One estimate is that informal learning may account for up to 75 percent of learning within organizations.

One reason why informal learning may be especially important is that it may lead to the effective development of *tacit* knowledge, which can be contrasted with *explicit* knowledge.⁵ **Explicit knowledge** refers to knowledge that is well documented, easily articulated, and easily transferred from person to person. Examples of explicit knowledge include processes, checklists, flowcharts, formulas, and definitions. Explicit knowledge tends to be the primary focus of formal training and employee development. **Tacit knowledge** refers to personal knowledge based on individual experiences that is difficult to codify. The characteristics of formal training and development programs, such as the relatively short duration of classroom or online training and limited opportunities for practice, may limit the extent to which tacit knowledge can be acquired. Thus, informal learning is central to the development of tacit knowledge because it involves employee interactions in personal relationships with peers, colleagues, and experts through which tacit knowledge is shared. It is important to recognize, however, that informal learning cannot replace formal training and employee development. Formal training and development are still needed to prepare employees for their jobs and to help them advance to future positions. Informal learning complements training by helping employees gain tacit knowledge that formal training cannot provide.

Knowledge management refers to the process of enhancing company performance by designing and implementing tools, processes, systems, structures, and cultures to improve the creation, sharing, and use of knowledge.⁶ Knowledge management contributes to informal learning. G4S Secure Solutions provides security solutions around the world.⁷ Its employees are spread across field offices and client locations. Most G4S security officers don't have computer access or are restricted by client firewalls. But security officers need timely information in order to protect clients and property. Seeking and sharing knowledge can help save lives. As a result, the company developed an Internet and social networking solution. It provides access to company materials, announcements, policies and procedures, training manuals, operational and support tools, and best practice forums. It can be accessed from anywhere, giving employees the ability to ask questions across the company as well as within their office, location, or work team. The solution includes social networking features similar to Facebook. Employee can create profiles that have their skills, interests, achievements, projects, and contact information. They can participate in threaded discussions. Tags can be used to identify similar documents or discussions on the same topic. Caterpillar Inc. moved toward becoming a continuous learning organization with the help of knowledge management.⁸ Thirty years ago, Caterpillar Inc., a manufacturer of construction and mining equipment, engines, and gas turbines, had most of its value in its plant and equipment. Today, intangible assets account for most of the company's value. Caterpillar's web-based knowledge management system, known as Knowledge Network, has thousands of communities of practice. They range in size from small teams to hundreds of employees worldwide. The communities of practice are useful for employees to gain both explicit and tacit knowledge. They are used to distribute information, post questions, and provide space for reference materials. One community of practice focused on bolted joints and fasteners. This gives specialized engineers who generally work alone in manufacturing facilities the ability to ask other engineers questions or get second opinions on designs and problems. The community of practice has resulted in improved decision making, increased collaboration and teamwork, and better product design and development. For example, members of the Bolted Joints and Fastener