

PERFORMANCE IMPROVEMENT/HPT MODEL: GUIDING THE PROCESS

Joan Conway Dessinger, CPT, EdD | James L. Moseley, CPT, EdD |
Darlene M. Van Tiem, CPT, PhD

This commentary is part of an ongoing dialogue that began in the October 2011 special issue of *Performance Improvement—Exploring a Universal Performance Model for HPT: Notes From the Field*. The authors feel that the performance improvement/HPT model in its past, present, and potential future iterations is not the only model for our field; however, it makes a systematic and flexible contribution to the field.

AS HUMANS, WE often have the desire for change to make things better. We desire something that runs smoother, is brighter, sounds better, is more fun, or is more comfortable. The challenge is that everyone has a different idea of what is smoother, brighter, sounds better, is more fun, or provides greater comfort. Based on experience, values, education, culture, or circumstances, we also have our own ideas of how to accomplish what is desired.

The performance improvement/HPT model represents a unifying process that helps accomplish successful change, create resiliency and sustainability, and make things better in the workplace. Models are very helpful to illustrate and gain consensus regarding performance improvement efforts. As Thomas Gilbert, the father of performance technology (1996), once stated, “My method is a method of engineering . . . the engineer knows precisely where to go, and will use any available methodology to get there. . . . The engineer must use whatever knowledge is available” (pp. 3–4). Like Gilbert, the performance improvement/HPT model is flexible and encourages practitioners to apply the model or methodology that best fits the situation.

VALUE OF MODELS

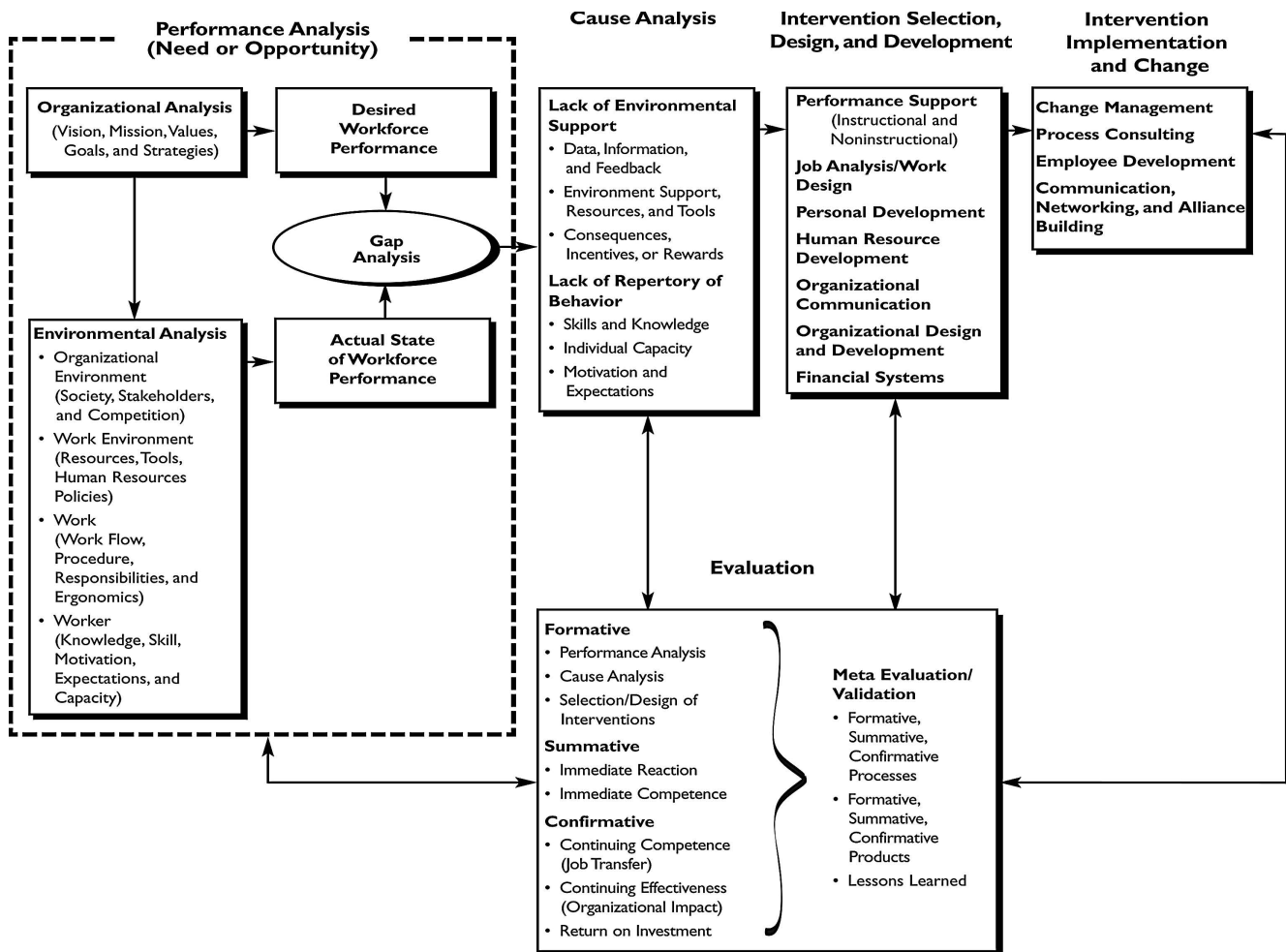
According to Richey, Klein, and Tracey (2010), “The term ‘model’ implies a representation of reality presented with a degree of structure and order” (p. 8). Richey et al. also categorize models as follows (p. 8):

- Conceptual—uses verbal and visual elements to represent one view of reality
- Procedural—uses verbal and visual elements to guide performance of a procedure or task
- Mathematical—uses equations to describe relationships

HISTORY OF THE HPT MODEL

The original human performance technology (HPT) model was developed by William Deterline and Marc Rosenberg and published by the International Society for Performance Improvement (ISPI) in 1992 “to illustrate the steps needed to function as a PT practitioner and accomplish performance improvement in the workplace” (Van Tiem, Moseley, & Dessinger, 2004, p. 6). Based on substantial changes in the performance improvement field, the three of us updated the existing model for both the 2001 and 2004 (see Figure 1) editions of *Fundamentals of Performance Technology: A Guide to Improving People, Process, and Performance* to align the model with current research and practice (Van Tiem, Moseley, & Dessinger, 2001, 2004). We made further changes to the model in the new third edition to be published this spring by ISPI/Wiley. This edition is titled *Fundamentals of Performance Improvement: Optimizing Results Through People, Processes, and Organizations*.

The purpose of *Fundamentals* is to provide a common-sense, systematic approach and consistent structure for



Source. From *Fundamentals of Performance Technology: A Guide to Improving People, Process, and Performance* by D.M. Van Tiem, J.L. Moseley, and J. C. Dessinger, 2004, p. 3. Reprinted with permission of John Wiley & Sons, Inc.

FIGURE 1. 2004 HUMAN PERFORMANCE TECHNOLOGY MODEL

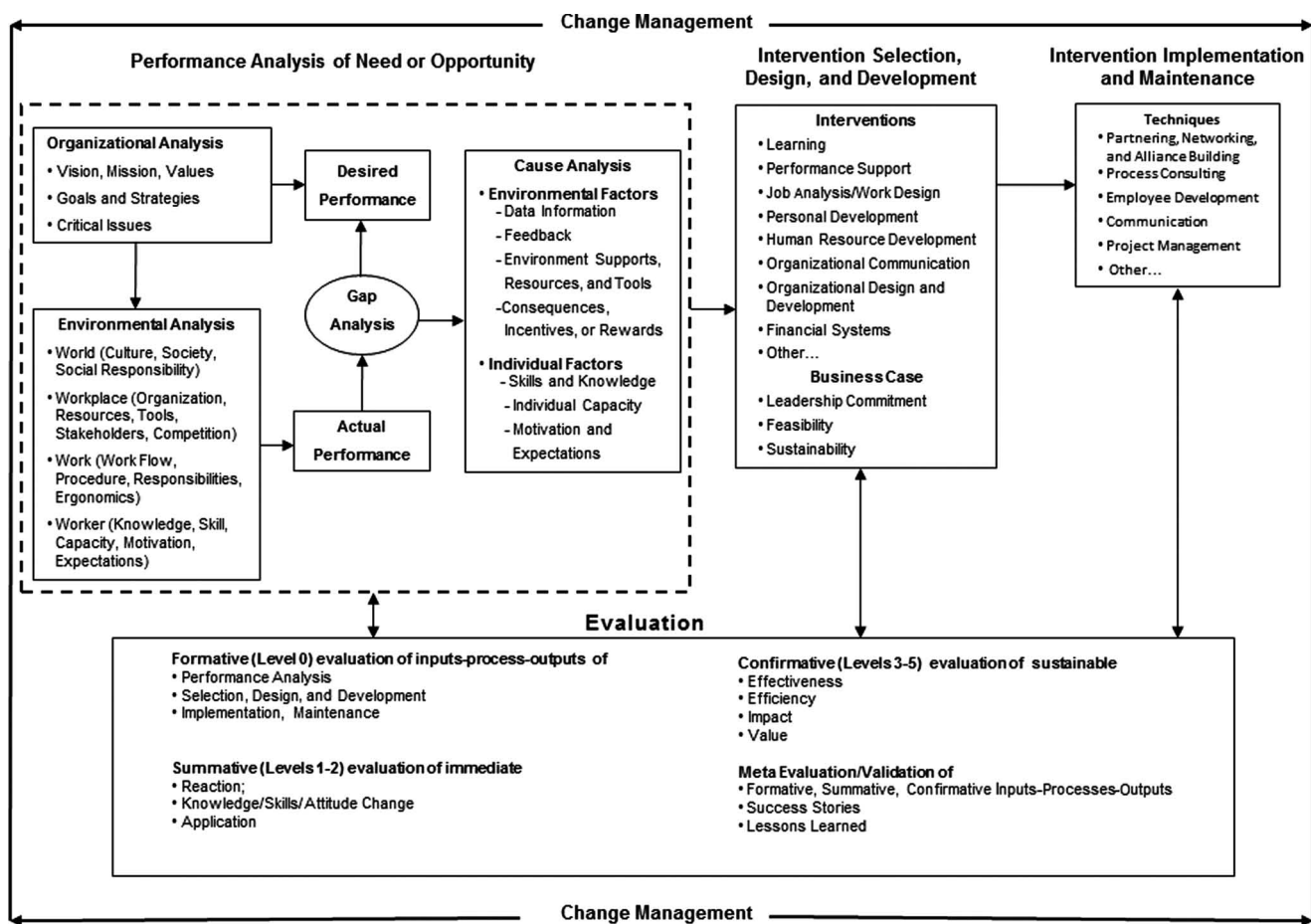
analyzing performance, designing or selecting appropriate performance improvement interventions, developing interventions, managing change, and evaluating results. The performance improvement/HPT model provides the organizing structure for achieving this purpose and has evolved to incorporate new ideas and represent current thinking and practice.

The 2012 changes to the model are based on research and input from practitioners in the field. The new title has evolved from *human performance technology (HPT) model* to *performance improvement/HPT model* in order to reflect current terminology. The 2012 model (see Figure 2) stresses the concept that performance improvement issues may be opportunities as well as problems, emphasizes the role of change management in all phases of successful performance improvement, and includes the concepts of feasibility and sustainability. The model is still designed to imply both a linear and an iterative progression of events. Each phase of the performance improvement process contains language that reflects the business

focus of performance improvement. For example, “critical issues” was added to organizational analysis; “business case” was added to the intervention selection, design, and development phase; and there is a new emphasis on project management during the intervention implementation and maintenance phase.

PHASES OF PERFORMANCE IMPROVEMENT/HPT MODEL

The steps in the performance improvement HPT model are still similar to another process model, the ADDIE model, which instructional systems design (ISD) practitioners use to analyze, design, develop, implement, and evaluate education and training programs and products. Both models use a systems approach; however, their language and focus are different. The HPT model goes beyond ADDIE because it is designed to meet the broader requirements of performance improvement practitioners and the organizations that seek their help. The analysis phase focuses



Source. From *Fundamentals of Performance Improvement: Optimizing Results Through People, Processes, and Organizations*, by D.M. Van Tiem, J.L. Moseley, and J.C. Dessinger, 2012. Reprinted with permission of John Wiley & Sons, Inc.

FIGURE 2. 2012 PERFORMANCE IMPROVEMENT/HPT MODEL

on performance needs and opportunities and includes gap and cause analysis; the intervention selection; design and development; and intervention implementation phases include instructional and noninstructional performance improvement interventions. Like ADDIE, the performance improvement/HPT model is sequential in that it suggests a progression from analysis through implementation. Unlike ADDIE, the performance improvement/HPT model visually and verbally suggests the integration of evaluation and change management into each of the process phases.

Change Management

A major change in the 2012 performance improvement/HPT model is change itself. The 2012 performance improvement/HPT model illustrates a systemic process for planning and accomplishing the desired changes. Change management encompasses every phase and each aspect of the entire performance improvement process to signify that change occurs and must be accounted for from the first analysis question. As the performance improvement

practitioner works through each phase, the practitioner considers how the problem or opportunity or intervention will change the world, workplace, work, and worker.

Performance Analysis

The first phase in the performance improvement process is to identify and clarify the opportunity or problem. The HPT model suggests conducting organizational, environmental, gap, and cause analyses. Organizational analysis looks at the vision, mission, values, goals, and strategies of the organization to determine the desired workplace performance. Environmental analysis examines four areas to establish what is happening within and outside the organization that has an impact on performance:

- World environment, including culture, society, and social responsibility
- Workplace environment, including organization, resources, tools, stakeholders, and competition

- Work environment, including work flow, procedures, responsibilities, and ergonomics
- Worker, including knowledge, skill, capacity, motivation, and expectations

Gap analysis identifies the difference between desired and actual performance. This can be a mathematical statement, such as “actual = 10 widgets per hour; desired = 75 widgets per hour; gap = 65 widgets.” However, it is often a qualitative statement, such as “Develop a mentoring system to strengthen bench strength in the workforce, enabling the organization to extend to new service areas or marketing niches.”

Cause Analysis

Cause analysis is now within the performance analysis phase. It provides the final link between performance analysis and intervention selection and design. It clarifies whether the identified gap is rooted in environmental or individual factors. Does the environment provide the required data and information, feedback, environmental supports, resources and tools, consequences, incentives or rewards? Does the individual worker possess the required knowledge, skills, capacity, motivation, and expectations to function optimally on the job?

Intervention Selection, Design, and Development

The selection, design, and development phase shows the enormity of the selection and design task and the importance of the analysis phase. The performance improvement practitioner may select from hundreds of possible performance improvement interventions, and there are hundreds more waiting to be designed. A complete and accurate cause analysis helps limit the possibilities. The performance improvement/HPT model suggests eight broad types of interventions: learning, performance support, job analysis and work design, personal development, human resource development, organizational communication, organizational design and development, and financial systems (see Exhibit 1 at the end of the article). However, it is up to the practitioner to select or design the most appropriate intervention based on his or her knowledge of performance improvement theory and best practice, as well as familiarity with the specific organization (see Exhibit 1).

Intervention Implementation and Maintenance

The implementation and *change* phase has been changed to implementation and *maintenance* to emphasize the growing need for sustainable performance improvement interventions. Again, as a procedural model, the performance improvement/HPT model can only provide guidance. The model suggests that using partnering,

networking, and alliance building; process consulting; employee development; communication; and project management techniques is critical to the success of this phase. Implementation must be systematic and structured and should include introducing the intervention, consolidating and using support for the ongoing change effort, and minimizing resistance.

Evaluation

One of the unique aspects of the performance improvement/HPT model is the verbal and visual integration of evaluation into all phases of the performance improvement process. The 2012 model emphasizes this integration by spreading the evaluation phase across the bottom of the model. Using past conceptual and procedural models of evaluation as blueprints, the performance improvement/HPT model suggests a seamless and continuous roll-out of evaluation from analysis through implementation. Formative evaluation ensures the goodness of the ongoing performance analysis, cause analysis, and intervention selection or design processes and products, and may also be used in the implementation and maintenance phase. Summative evaluation values the immediate reaction; knowledge, skills, or attitude change; and application of the performance intervention as it is implemented. Confirmative evaluation identifies and explains the sustainable effectiveness, efficiency, impact, and value over time. Meta evaluation validates the formative, summative, and confirmative evaluation inputs, processes, and outputs—and identifies the success stories and lessons learned. In the 2012 model, each type of evaluation is linked to the Kirkpatrick levels of evaluation, which are common to the business world.

EXAMPLES OF USES OF THE PERFORMANCE IMPROVEMENT/HPT MODEL

CPT Program

The performance improvement/HPT model is a tool that can be used to support ISPI’s Certified Performance Technologist (CPT) program, which results in a professional designation that represents proficiency in applying performance improvement principles. (See ISPI.org/Certification.) The model aligns with ISPI’s 10 Standards of Performance Technology: “Standards 1–4 reflect the four basic principles that underlie all successful performance improvement efforts. Standards 5–10 represent a systematic process for implementing the four principles” (Van Tiem et al., 2004, p. 230). The basic four RSVP principles are focus on *results* and outcomes,

take a *systems* approach, add *value*, and work in *partnership* and collaborate with clients and other specialists. The basic process as stated in Standards 5–10 is the process represented in the HPT model:

- Be systematic—Needs or opportunity analysis
- Be systematic—Cause analysis
- Be systematic—Design
- Be systematic—Development
- Be systematic—Implementation
- Be systematic—Evaluation

The performance improvement/HPT model, along with *Fundamentals of Performance Improvement* (Van Tiem, Moseley, & Dessinger, 2012), helps workshop participants prepare for certification.

The Workplace

A variety of organizations have used the performance improvement/HPT model to guide them through performance improvement efforts. Here are just a few examples.

Manufacturing. A manufacturing company invested heavily in lean manufacturing tools to increase its competitiveness in the global marketplace. Changing to lean manufacturing requires a complex progression of learning and accommodating new ideas. Along with its realization of the need for new tools, the company saw that it must also adopt and use effective methods for troubleshooting issues that could prevent workers from meeting production goals. The company's internal performance improvement consultant suggested using the performance improvement/HPT model to guide continuous performance improvement efforts.

A performance improvement opportunity arose when one shift did not follow the current lean processes in its procedures, consistently produced lower-quality product, and frequently missed production quotas. Using the model, a team made up of the consultant, company leaders, and stakeholders isolated and identified the underlying cause of the issue, designed an intervention, and increased the overall performance of an entire assembly plant. In addition, because the workers in this area were nonnatives, the group also used the model to help them examine and reduce barriers specifically related to workers of another culture.

Training. A nationally recognized training company used the performance improvement/HPT model to improve customer and employee satisfaction. The performance analysis indicated that the company was accepting bids for project work and committing resources, although

there was uncertainty about the availability of professional and staff resources. This practice resulted in a shortage of resources and sometimes a mismatch between worker and task. The outcome was employee dissatisfaction, ultimately resulting in unnecessary employee turnover. The company determined that it lacked readily accessible and up-to-date information regarding the available employee resource pool. If a bid committed three instructional system designers, one editor, and one graphic artist, then management needed to know that these resources were available for assignment to the project. Once this information was available, it was possible to bid accurately on and allocate appropriate and adequate resources to new projects. Customer satisfaction increased, and employee turnover decreased.

CONCLUSION

Multiple types of models are required to define, inform, and guide a field as complex as performance improvement. The performance improvement/HPT model in its past, present, and potential future iterations makes an important contribution to the field because it represents a performance improvement process that is both systematic and flexible. Beginners in the field can use the model to learn the basic systematic process for improving performance; experienced practitioners can flex the model to adapt to the needs of a particular organization; and all levels of practitioners can use the model to explain what it is that they do or can do to improve performance. 🌟

References

- Gilbert, T.F. (1996). *Human competence: Engineering worthy performance* (Tribute ed.). Amherst, MA: HRD Press/ISPI.
- Richey, R., Klein, J., & Tracey, M. (2010). *The instructional design knowledge base: Theory, research, and practice*. Routledge.
- Van Tiem, D., Moseley, J.L., & Dessinger, J.C. (2001). *Fundamentals of performance technology: A guide to improving people, process, and performance* (1st ed.). Silver Spring, MD: International Society for Performance Improvement.
- Van Tiem, D., Moseley, J.L., & Dessinger, J.C. (2004). *Fundamentals of performance technology: A guide to improving people, process, and performance* (2nd ed.). Silver Spring, MD: International Society for Performance Improvement.
- Van Tiem, D., Moseley, J.L., & Dessinger, J.C. (2012). *Fundamentals of performance improvement: Optimizing results through people, processes, and organizations* (3rd ed.). San Francisco, CA: Wiley/International Society for Performance Improvement.

Performance Support Tool (PST): Intervention Selector

Directions: Identify a maximum of 10–15 possible interventions and rank or prioritize these interventions.

Learning Interventions

- Knowledge management
- Organizational learning
- Learning management system
- Content management system
- Education/training
- Self-directed learning
- On-the-job learning
- Just-in-time learning
- Action learning
- Blended learning
- Technical and nontechnical learning
- Social learning
- Interactive learning technologies
- Enterprise learning
- Classroom learning
- Distance/distributed learning
- Online/e-learning
- Wikis, avatars, and more
- Games/simulations

Performance Support Interventions

- Performance support tools (PSTs) or job aids
- Electronic performance support systems (EPSS)
- Documentation and standards
- Expert systems

Job Analysis/Work Design Interventions

Job Analysis

- Job descriptions
- Job specifications

Work Design

- Job design
- Job enlargement
- Job rotation
- Job enrichment
- Reengineering, realignment, restructuring

Human Factors

- Ergonomics
- Safety engineering
- Security management
- Green workplace

Quality Improvement

- Total quality management (TQM)
- Continuous improvement
- Preventive maintenance (PM)
- Six Sigma
- Lean organizations

Personal Development Interventions

- Feedback
- Coaching
- Mentoring
- Emotional intelligence
- Social intelligence
- Cultural intelligence
- Communities of professional practice

Source. From *Fundamentals of Performance Improvement: Optimizing Results Through People, Processes, and Organizations*, by D.M. Van Tiem, J.L. Moseley, and J.C. Dessinger, 2012. Reprinted with permission of John Wiley & Sons, Inc.

EXHIBIT 1. INTERVENTION SELECTOR: A PERFORMANCE SUPPORT TOOL FOR SELECTING APPROPRIATE TYPE(S) OF INTERVENTIONS (*Continued*)

Human Resource Development (HRD) Interventions

Talent Management

- Staffing
- Employee development
- Retention
- Compensation/benefits
- Health and wellness
- Retirement planning
- Labor relations

Organizational Growth

- Succession planning
- Career pathing
- Leadership development
- Executive development
- Management development
- Supervisory development

Individual Growth

- Motivation
- Performance management
- Key performance indicators (KPIs)
- Performance appraisals
- 360° appraisals
- Competencies
- Competency testing

Organizational Communication Interventions

- Communication networks
- Information systems
- Suggestion systems
- Grievance systems
- Dispute resolution
- Social media

Organizational Design and Development Interventions

Empowerment

- Team strategies
- Virtual teams
- Problem solving

Organizational Values

- Culture
- Diversity
- Inclusion strategies
- Globalization
- Localization
- Social responsibility
- Ethics
- Decision making

Organizational Pro-Action

- Strategic planning
- Environmental scanning
- Appreciative inquiry
- Outsourcing
- Benchmarking
- Balanced scorecard
- Dashboards

Financial Systems Interventions

- Open book management
- Profit versus cost center
- Financial forecasting
- Capital investment and spending
- Cash flow analysis
- Cash flow forecast
- Mergers, acquisitions, joint ventures

EXHIBIT 1. INTERVENTION SELECTOR: A PERFORMANCE SUPPORT TOOL FOR SELECTING APPROPRIATE TYPE(S) OF INTERVENTIONS

JOAN CONWAY DESSINGER, CPT, EdD, is editor of *Performance Improvement*. She is also founder of and senior consultant with the Lake Group, an adjunct instructor in Wayne State University's instructional technology graduate program, an award-winning author, and an editor. Most recently she coedited *Handbook of Improving Performance in the Workplace, Volume 3, Measurement and Evaluation* (2010), and coauthored and edited the third edition of *Fundamentals of Performance Improvement* (2012). She may be reached at jdessinger@aol.com or joandessinger@ispi.org.

JAMES L. MOSELEY, CPT, EdD, is associate professor of instructional technology at Wayne State University, College of Education, Detroit, Michigan, where he teaches program evaluation and performance technology graduate courses. He has coauthored six books, including four ISPI award winners. He has published articles and book chapters and consults with business, industry, and health care organizations on HPT, evaluation, and needs assessment. He frequently presents at ISPI, ASTD, and other professional conferences. He may be reached at moseley@wayne.edu.

DARLENE M. VAN TIEM, CPT, PhD, is part-time faculty at Capella University and associate professor emeritus and former coordinator of graduate-level performance improvement and instructional design in the School of Education, University of Michigan—Dearborn. She is a past president of ISPI and was a member of the board of directors between 2006 and 2011. She has written numerous books and articles and is lead author for the third edition of *Fundamentals of Performance Improvement* (2012). She may be reached at dvt@umich.edu.