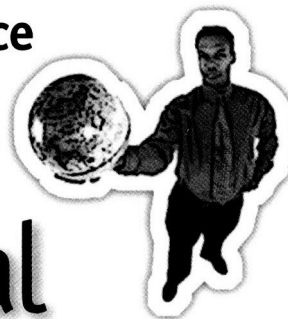# Improving Individual and Organizational Performance

The Case for International Standards

by James D. Klein, PhD, and Rita C. Richey, PhD

Competencies for professionals in the performance improvement field have received considerable attention in recent years. For example, the International Society for Performance Improvement (ISPI) has identified 10 standards that are used as the basis for certifying performance technologists. Others have examined the skills of performance technologists (Fox & Klein, 2003; Klein & Fox, 2004; Stolovitch, Keeps, & Rodrigue, 1999). In addition, the competencies for other job roles in the Human Performance Technology (HPT) and training fields have been identified.

In this article, we discuss the competencies for instructional designers, training managers, and instructors identified by the International Board of Standards for Training, Performance and Instruction (ibstpi). We begin by providing a brief explanation of ibstpi's history, background, and mission, followed by a discussion of how the organization identifies and validates competencies. We also provide a list of standards for instructional designers, training managers, and instructors that have been validated by practitioners in all regions of the world.

Background, History, and Mission

The ibstpi grew out of a certification task force established in 1977 by the National Society for Performance and Instruction (now ISPI) and the Association for Educational Communications and Technology (AECT). This task force was composed of more than 30 practitioners and academics with expertise in training, performance, and instruction, all actively involved in the field.

In 1984, ibstpi became an independent, not-for-profit organization dedicated to increasing the capability of individuals and organizations in the training, instruction, and performance improvement professions through the development of competency-based standards. The board now consists of 15 professionals elected to broadly represent academia, businesses, consultancies, and government agencies throughout the world. Currently, its directors are from Asia, Australia, Canada, Europe, and the United States.

The mission of ibstpi is to develop, validate, and promote the implementation of international standards to advance training, instruction, learning, and performance improvement for individuals and organizations (see http://www.ibstpi.org). These standards are identified using a competency development model.

What Is a Competency?

Most definitions of competency development involve supporting or improving human performance. According to Richey, Fields, and Foxon (2001), a *competency* describes the critical ways in which competence is demonstrated; competence is the state of being well qualified. Lucia and Lepsinger (1999) define a competency as the knowledge, skill, or characteristic required to effectively perform a role in an organization. Parry (1998) identifies a competency as knowledge, attitudes, or skills that define the core abilities required for successful performance in a given job. McLagan (1997) suggests that competencies can be viewed in six different ways:

- Job tasks
- Results of work efforts
- Outputs
- Knowledge, skills, and attitudes
- Qualities that describe superior performers
- Bundles of attributes

Similarly, Hooghiemstra defines competencies as—motives, traits, self-concepts, attitudes or values, content knowledge, or cognitive or behavioral skills—any individual characteristic that can be measured or counted reliably and that can be shown to differentiate significantly between superior and average performers, or between effective and ineffective performers. (1992, p. 28)

The ibstpi defines competency as "[a] set of related knowledge, skills, and attitudes that enable an individual to effectively perform the activities of a given occupation or job function to the standards expected in employment" (Klein, Spector, Grabowski, & de la Teja, 2004; Richey et al., 2001).

As such, competency is related to performance on a job and can be measured against commonly accepted standards. This approach combines several points of view, including a collection of knowledge, skills, and attitudes; an identification of job tasks; and the qualities of superior performers that can be measured reliably (Hooghiemstra, 1992; Lucia & Lepsinger, 1999; McLagan; 1997; Parry; 1998; Richey et al., 2001). The ibstpi competencies are statements of performance, not personality traits or beliefs. Furthermore, there is an implication that competence can be developed through training and instruction.

A Model for the Development of Competencies

The construction of a valid set of competency standards is a large-scale research and development process. With respect to the ibstpi standards, each recent project has involved concentrated work by a research team, involvement of the entire board, and input of hundreds of practitioners and academics representing organizations worldwide. The generic ibstpi competency development model is shown in Figure 1.

Competency development models are used to identify required knowledge, skills, attitudes, capabilities, and job tasks within a defined occupation or organizational role. Competency identification begins with a well-defined job role. If a well-defined job role does not exist, then defining it becomes the initial step. Once a job is defined, specific current practice and existing standards are identified to facilitate competency development. Furthermore, the ethics and values commonly used to evaluate such behaviors must also be determined. Finally, a future vision of the job role is clarified. This vision may be the result of emerging trends and
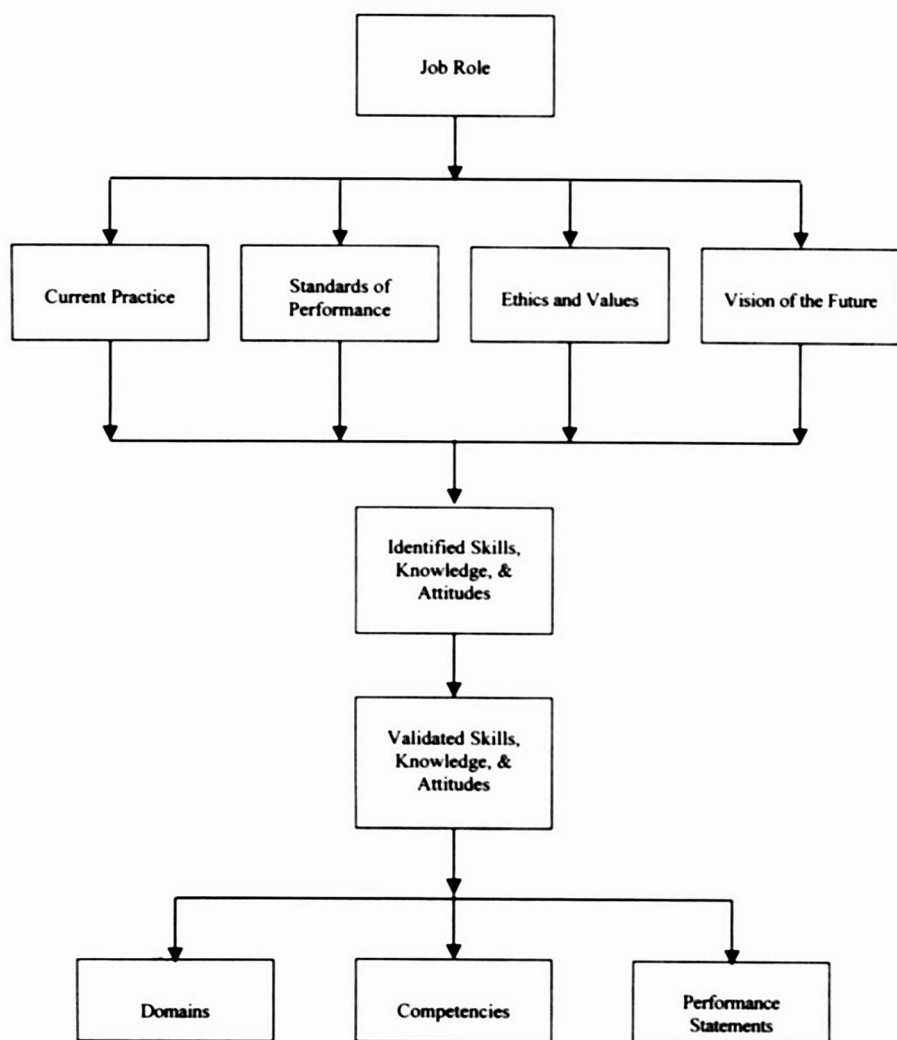

Figure 1. The ibstpi Competency Development Model.

interpretations of current research, or it may be the result of societal or business pressures. Current practice, existing standards, ethics, values, and future vision all provide major input into the identification and validation of the knowledge, skills, and attitudes critical to a particular job role.

The ibstpi competency model consists of three important components: domains, competencies, and performance statements. A domain is a cluster of related competencies. Each domain categorizes a group of competencies into an area of activity and identifies a theme for that cluster. Spencer and Spencer (1993) recommend this tactic for competency modeling. Competency statements are the central component of the ibstpi model. Each one is a short, general description of a complex effort. One example for instructors is, "Demonstrate effective questioning skills." As with all competencies, additional detail is required to fully explain what is involved in demonstrating effective questioning skills. These explanations are provided via performance statements.

Demonstration of a particular competency consists of several specific performances. For example, the competency for demonstrating effective questioning is partially supported by the performance statements, "Ask clear and relevant questions" and "Use questions to generate and guide discussions." Competencies and performance statements are structurally the same, differing only in the level of detail and behavior specificity.

The ibstpi competency development model provides overall direction for its competency development process. In actual operation, there are four major phases, each fundamentally an empirical procedure:
1. Identification of foundational research
2. Competency drafting
3. Competency validation
4. Rewriting

The ibstpi competencies are based on research foundations, varying in terms of the particular topic. In the case of competency updates, the original set (which was rooted in a research base as well) also serves as a starting point. This serves as the first step in establishing content validity for the standards. Basic premises and tentative assumptions are then articulated and agreed on. Finally, a base list of competencies is developed using these sources of information. This list serves as the starting point for a new development process.

The ibstpi board of directors serves as an expert focus group that analyzes and debates the base list. Competencies and performance statements are rewritten by people with particular expertise in a given area. The new list is analyzed, debated, and rewritten several times to reflect the evolving input and to establish format consistency.

Once a list is established with full board approval, the formal content validation process begins. Typically, this is a survey research effort to establish the extent to which each competency and performance statement is critical in the workplace. These instruments are administered to a volunteer sample of several hundred practitioners and academics in diverse geographical locations and work environments.

The final competency list is then modified to reflect the input of the validation group. Competencies or performance statements without a high degree of support are removed, and new statements are added that have been generated and supported substantially. If respondents offer conflicting opinions, the board makes the ultimate decision based on its collective experience and vision. Ultimately, the board approves a final set of competency standards.

The ibstpi competencies for instructional designers, training managers, and instructors reflect a continuing commitment to improve professional practice.

The ibstpi Competency Standards

Three sets of competencies for a specific job function have been developed and recently revised. These are instructional designer, training manager, and instructor competencies. A fourth set of competencies (for evaluators) is currently being validated. The three completed sets of standards are discussed below.

Competencies for Instructional Designers

The original set of ibstpi Instructional Design (ID) competencies was developed in 1986 and was the result of more than a year of research, discussion, and validation by a group of ID practitioners and academics. Since that time, there have been several developments in the major theories that underpin the instructional design field. In recognition of these developments, ibstpi revised the ID competencies and released an updated set in 2000.

The updated version still retains the essential elements of the 1986 set, but also (1) reflects the influence of advanced technologies, team-based design, and business management skills; (2) addresses the professional foundations of design, as well as planning and analysis, design and development, and implementation and management skills; and (3) categorizes competencies as essential or advanced. These developments were validated by an international sample of 175 ID practitioners.

Competency	Level
Communicate effectively in visual, oral, and written form.	Essential
Apply current research and theory to the practice of instructional design.	Advanced
Update and improve one's knowledge, skills, and attitudes pertaining to instructional design and related fields.	Essential
Apply fundamental research skills to instructional design projects.	Advanced
Identify and resolve ethical and legal implications of design in the work place.	Advanced
Conduct a needs assessment.	Essential
Design a curriculum or program.	Essential
Select and use a variety of techniques for determining instructional content.	Essential
Identify and describe target population characteristics.	Essential
Analyze the characteristics of the environment.	Essential
Analyze the characteristics of existing and emerging technologies and their use in an instructional environment.	Essential
Reflect on the elements of a situation before finalizing design solutions and strategies.	Essential
Select, modify, or create a design and development model appropriate for a given project.	Advanced
Select and use a variety of techniques to define and sequence the instructional content and strategies.	Essential
Select or modify existing instructional materials.	Essential
Develop instructional materials.	Essential
Design instruction that reflects an understanding of the diversity of learners and groups of learners.	Essential
Evaluate and assess instruction and its impact.	Essential
Plan and manage instructional design projects.	Advanced
Promote collaboration, partnerships, and relationships among the participants in a design project.	Advanced
Apply business skills to managing instructional design.	Advanced
Design instructional management systems.	Advanced
Provide for the effective implementation of instructional products and programs.	Essential

Table 1. The ibstpi Instructional Designer Competencies. © 2000 by the International Board of Standards for Training, Performance and Instruction. Used with permission.

The updated ID standards include 23 competencies clustered into four general domains. These are supported by 122 performance statements. The 23 ID competencies are given in Table 1. A listing of the performance statements and a full discussion of the ID standards can be found in Richey et al. (2001).

Competencies for Training Managers

The first set of ibstpi training manager standards was developed in 1986 by a group of practitioners and academics in the human resource development field. They were based on research of the available literature, internal corporate documents, observations, peer review, and evaluation. The resulting standards were an attempt to define core competencies for those in the position of training manager.

In light of changes in organizations and the nature of the training function and the human resources development profession over the previous decade, ibstpi decided to update the 1986 training manager competencies and their matching performance statements. A revised set of standards was identified and then validated globally with a sample of almost 500 practitioners in all regions of the world. The result was 14 competency statements (see Table 2) and 88 performance statements, categorized into four domains. The performance statements, a full discussion of the training manager's job, specialization areas, applications and uses of the competencies, and the competency validation

process are described by Foxon, Richey, Roberts, and Spannaus (2003).

Competencies for Instructors

The original set of ibstpi instructor competencies was published in 1988 following extensive review and testing by a group of practitioners and academics in the training and instructional design field. The standards identified the core competencies of instructors: those decisions, actions, and behaviors that competent instructors must demonstrate to complete an instructional assignment successfully (Hutchison, Shepherd, & Stein, 1988). The original instructor competencies mainly addressed the standards for trainers in face-to-face classroom settings. They were used as the foundation of a certification test administered to more than 15,000 technical trainers and as the basis for many train-the-trainer programs.

The updated ibstpi instructor competencies reflect developments in teaching and learning in the past decade, including the use of online and blended delivery systems. They take into account the requirements introduced by new types of learners, new technologies to support learning and performance, and new approaches to instruction. In addition, they were validated globally by a sample of more than 1,300 practitioners in all regions of world. The updated instructor standards include 18 competencies (see Table 3) clustered in five general domains and supported by 98 performance statements. A listing of the performance statements and a full discussion of the instructor standards can be found in Klein, Spector, Grabowski, and de la Teja (2004).

Communicate effectively in visual, oral, and written form.
Comply with established legal and ethical standards.
Maintain networks to advocate for and support the training function.
Update and improve professional and business knowledge, skills, and attitudes.
Develop and monitor a strategic training plan.
Use performance analysis to improve the organization.
Plan and promote organizational change.
Apply instructional system design principles to training projects.
Use technology to enhance the training function.
Evaluate training and performance interventions.
Apply leadership skills to the training function.
Apply management skills to the training function.
Apply business skills to the training function.
Implement knowledge management solutions.

Table 2. The ibstpi Training Manager Competencies. © 2001 by the International Board of Standards for Training, Performance and Instruction. Used with permission.

Communicate effectively.
Update and improve one's professional knowledge and skills.
Comply with established ethical and legal standards.
Establish and maintain professional credibility.
Plan instructional methods and materials.
Prepare for instruction.
Stimulate and sustain learner motivation and engagement.
Demonstrate effective presentation skills.
Demonstrate effective facilitation skills.
Demonstrate effective questioning skills.
Provide clarification and feedback.
Promote retention of knowledge and skills.
Promote transfer of knowledge and skills.
Use media and technology to enhance learning and performance.
Assess learning and performance.
Evaluate instructional effectiveness.
Manage an environment that fosters learning and performance.
Manage the instructional process through the appropriate use of technology.

Table 3. The ibstpi Instructor Competencies. © 2004 by the International Board of Standards for Training, Performance and Instruction. Used with permission.

Uses of Competency Standards

The competencies above represent more than the knowledge, skills, and attitudes expected of professionals in various settings. They also provide operational definitions that can be used by organizations to define job requirements and position descriptions, establish performance indicators, and improve professional development programs. These competencies also provide individuals with specific items that can be used to guide self-improvement.

A topic of interest related to competency standards is that of professional certification. Professional certification has been defined as a voluntary process by which a professional association or organization measures and reports on the degree of competence of individual practitioners (Gilley, Geis, & Seyfer, 1987). The intent of certification is to inform the public that individuals who have achieved certification have demonstrated a particular degree of knowledge and skill. It offers title protection, as only those who are certified may use a particular title. It is one method of protecting the public (Browning, Bugbee, & Mullins, 1996). Functionally, professional certification constitutes a formal and public definition of a profession.

Conclusion

The basic intent of ibstpi is to improve individual and organizational learning and performance and, in doing so, to promote the quality and integrity of professional practice. Consistent with this mission, the competencies for instructional designers, training managers, and instructors reflect a continuing commitment to improve professional practice. While the original standards developed by ibstpi have stood the test of time for nearly two decades, it is likely that frequent revisions will be required in the future to keep pace with rapid changes in the performance improvement field. It

is also possible that the new competency standards will need to be more complex to match the more sophisticated work environment. New standards, such as the current project to identify competencies for evaluators, may be required to meet the needs of the performance improvement community. 🔆

References

Browning, A.H., Bugbee, A.C., & Mullins, M.A. (Eds.) (1996). *Certification: A NOCA handbook.* Washington, DC: The National Organization for Competency Assurance.

Fox, E.J., & Klein, J.D. (2003). What should instructional designers and technologists know about human performance technology? *Performance Improvement Quarterly, 16*(3), 87-98.

Foxon, M., Richey, R.C., Roberts, R., & Spannaus, T. (2003). *Training manager competencies: The standards* (2nd ed.). Syracuse, NY: ERIC Clearinghouse on Information and Technology.

Gilley, J., Geis, G., & Seyfer, C. (1987). Let's talk certification: Questions and answers for the profession about the profession. *Performance and Instruction, 26*(1), 7-17.

Hooghiemstra, T. (1992). Integrated management of human resources. In Mitrani, A., Dalziel, M., & Fitt, D. (Eds.), *Competency based human resource management* (pp. 17-46). London: Kogan Page.

Hutchison, C., Shepherd, J., & Stein, F. (1988). *Instructor competencies: The standards* (Vol. I). Chicago, IL: International Board of Standards for Training, Performance and Instruction.

Klein, J.D., & Fox, E.J. (2004). Performance improvement competencies for instructional technologist. *TechTrends, 48*(2), 22-25.

Klein, J.D., Spector, J.M., Grabowski, B., & de la Teja, I. (2004). *Instructor competencies: Standards for face-to-face, online, and blended settings.* Greenwich, CT: Information Age Publishing.

Lucia, A.D., & Lepsinger, R. (1999). *The art and science of competency models: Pinpointing critical success factors in organizations.* San Francisco: Jossey-Bass/Pfeiffer.

McLagan, P.A. (1997, May). Competencies: The next generation. *Training & Development,* 40-47.

Parry, S.B. (1998, June). Just what is a competency? (And why should you care?). *Training, 35*(6), 58-64.

Richey, R.C., Fields, D.F., & Foxon, M. (with Roberts, R.C., Spannaus, T., & Spector, J.M.). (2001). *Instructional design competencies: The standards* (3rd ed.). Syracuse, NY: ERIC Clearinghouse on Information and Technology.

Spencer, L.M., & Spencer, S.M. (1993). *Competence at work: Models for superior performance*. New York: John Wiley & Sons, Inc.

Stolovitch, H.D., Keeps, E.J., & Rodrigue, D. (1999). Skill sets, characteristics, and values for the human performance technologist. In Stolovitch, H., & Keeps, E. (Eds.), *Handbook of human performance technology* (pp. 651-697). San Francisco: Jossey-Bass/Pfeiffer.

Related Readings

ibstpi. (1986). *Instructional design competencies: The standards*. Batavia, IL: International Board of Standards for Training, Performance and Instruction.

ibstpi. (1989). *Training manager competencies: The standards*. Batavia, IL: International Board of Standards for Training, Performance and Instruction.

ibstpi. (1992). *Instructor competencies: The standards* (Vol. II). Batavia, IL: International Board of Standards for Training, Performance and Instruction.

James D. Klein, PhD, is Professor and Program Leader in the Educational Technology program at Arizona State University, Tempe. He serves as a director and treasurer of ibstpi. Previously, he served as development editor of Educational Technology Research & Development and president of the Design and Development Division (D&D) and the Research and Theory Division of the Association for Educational Communications and Technology (AECT). He has been recognized as an outstanding alumnus of the Instructional Systems program at Florida State University and for his service to D&D. His research, teaching, and consulting activities are in the areas of instructional design, strategies for active learning, and performance improvement. He may be reached at james.klein@asu.edu.

Rita C. Richey, PhD, is Professor and Program Coordinator of Instructional Technology in the College of Education at Wayne State University. She has been at Wayne State for more than 30 years and has extensive experience in program design and development, teaching, and education and training research. She is published in the area of ID and technology. She has written or edited 10 books, including *The Theoretical and Conceptual Bases of Instructional Design*, *Designing Instruction for the Adult Learner*, and *The Legacy of Robert M. Gagne*. She is also coauthor of the third edition of *Instructional Design Competencies: The Standards*, and the third edition of *Training Manager Competencies: The Standards*, and *Instructional Technology: The Definition and Domains of the Field*. This latter book received the 1995 Outstanding Book Award and the 1996 Brown Publication Award, both from AECT. It has been translated into three additional languages. She has published more than 30 articles and books chapters. She may be reached at rrichey@wayne.edu.

9

Improving Individual and Organizational Performance: The Case for International Standards

by James D. Klein and Rita C. Richey

Competency is a set of related knowledge, skills, and attitudes that enables an individual to effectively perform the activities of a given occupation or job function to the standards expected in employment. Competencies can be used by organizations to define job requirements and position descriptions, establish performance indicators, and improve professional development programs. They also can be used by individuals to guide self-improvement. This article focuses on the competencies identified by the International Board of Standards for Training, Performance and Instruction (ibstpi). The article provides a brief history and background, as well as a discussion of how ibstpi identifies and validates competencies. The article also provides a list of standards for instructional designers, training managers, and instructors that have been validated by practitioners in all regions of the world.

15

Emotional Intelligence and Organizational Performance: Implications for Performance Consultants and Educators

by Svetlana Holt and Steve Jones

For the past decade, interest in the role of emotion in organizational life has been increasing, and many authors emphasize the significance of managing emotions for organizational success. What is known about Emotional Intelligence (EI)? Is it a skill, an aptitude, or a combination of both? What does a high EI score predict? Which measurement instruments are most effective in predicting social behaviors, academic performance, and overall life outcomes? This research examines the concept of EI in conjunction with organizational behavior, education, and training for enhanced emotional knowledge within businesses and academic organizations. The role of an emotional quotient is considered in management effectiveness, together with implications for schools.

22

One of the Corporate World's Biggest Headaches: Ethical Behavior

by Philip W. Hurst, PhD, William Palya, PhD, and William C. Mills, Jr.

This article provides corporate leaders and HPT professionals with information that will allow them to evaluate how their corporate culture can support ethical behavior while flourishing in regard to their business goals. The real-world impact of its message is the reduction in the number of unethical actions within an organization. The unacceptable number of unethical acts costs organizations huge sums of money and even may cause complete collapse. Senior managers particularly will be excited about reviewing the basic decision strategies and behavioral principles that can align their corporate culture's values with their way of doing business.

27

The Strategic Use of Stories

by Terrence Gargiulo

Effective organizational communication and learning depends on stories. Recent research explores two new frameworks. The first framework describes nine functions of stories that produce unique effects, which can be leveraged in a variety of performance interventions. The second framework identifies key strategic gaps in organizational communication and what role stories can play in bridging these gaps. Data from surveys and interviews with Fortune 500 leaders are summarized to introduce a communication competency map based on the power of stories. The map is composed of three rings, with three competencies in each ring. These nine competencies represent essential communication behaviors that need to be developed and cultivated. Applications of the research for performance technologists are suggested at the end of the article.

34

A Study of Organizational Learning at Smalltown Hospital

by Yun-Jo An and Charles M. Reigeluth, PhD

In response to the growing importance of a learning organization for human performance, this study explores organizational learning, one of the strategies for creating a learning organization. Seven facilitating factors of organizational learning were identified from a review of literature: individual learning, team learning, knowledge sharing, shared visions, positive learning environment, change-friendly culture, and systems thinking. A case study was conducted to explore the value of these seven facilitating factors in understanding the strengths and weaknesses in how a hospital facilitated organizational learning. Data were collected through interviews and document review and organized under the seven factors. The results provide practical strategies for facilitating organizational learning based on the experience of a hospital, help reveal the big picture of organizational learning by addressing the relationships among the seven facilitating factors, and suggest using a systemic approach in facilitating organization learning, rather than providing fragmentary strategies.

40

The Performance Technologist's Toolbox: Critical Incidents

by Anne F. Marrelli, CPT, PhD

This sixth of the Performance Technologist's Toolbox series focuses on the critical incident method of data collection. Critical incidents are narrative descriptions of important events that occur on the job and how employees behave in those situations. Critical incidents document the work context, the specific situation that arose, the persons who were involved, what each person did and said, and the results. The incidents may be confined to a particular topic or may cover the breadth of work experience. This article describes the vehicles used to collect critical incidents including focus groups, individual interviews, surveys, performance records, or work diaries. It also describes the applications of critical incidents in several areas of performance technology and provides examples of those applications in organizations. The advantages and disadvantages of critical incidents as a data collection method are outlined, and guidelines for their use are provided.