IN THIS ARTICLE HRD Field, Future Trends in HRD, High-Performance Work Systems

Reinventing

BUSINESS IS BOOMING FOR UNIVERSAL DYNAMICS, a small firm in Woodbridge, Virginia, that makes machinery for the plastics industry. The company is doing so well that the National Association of Manufacturers cited it this year as a model high-performance company.

Universal Dynamics enjoys a growing share in U.S. and foreign markets. Its workers get salary increases of at least 10 percent a year. They know how to operate sophisticated computer-controlled equipment and are skilled in the latest quality-control methods.

It might sound like an ideal company to work for, but no professional trainer need apply. "The dawning awareness that high-performance work systems, with the emphasis on learning, hold the key to future competitive success represents a tremendous opportunity for the training profession— but only if the profession reinvents itself."

—Rosabeth Moss Kanter, Training & Development, May 1994

Workers at Universal Dynamics get plenty of training, but it's delivered from the shop floor and managed by the plant production manager, David Blevins. "Our welders and

BY PATRICIA A. GALAGAN



electricians are teaching the classes," he says. "We call them teachers."

The Loewen Group is a fast-growing funeral service firm with its headquarters in Burnaby, British Columbia, and 600 funeral homes across North America. One hundred new funeral homes joined the company in 1993. The member firms are autonomous but are linked by some common systems.

To roll out a new automated accounting system to all 600 funeral homes, the company radically changed the way it was delivering training. Face-to-face classes were scrapped, in favor of a multimedia training system. The new system was installed by IBM and is managed not by a training professional, but by Tom Haksi, the MIS director.

FN-74 is the name Ford Motor Company gave to the prototype of its newest Lincoln Continental. The team of design engineers that took the FN-74 from conception to launch used a set of learning tools to build trust, interdependence, and better communication among the team members. Team members believe their organizational-learning efforts have paid off in fewer mistakes, more efficient design work, and a much better launch process.

Ford's organizational-learning tools came from the MIT Center for Organizational Learning. The impetus for applying them in the FN-74 launch team came not from Ford's human resource department, but from the team's business planning manager, Nick Zeniuk, who believed the tools would help the team achieve a business goal.

Has your company restructured the training department to support a new strategic direction? Has it fired trainers but added training? Has it ditched classroom training for instruction delivered at the workstation? Has it turned training over to the MIS department? Has it sought out the latest learning strategies without your involvement?

Those are some of the warning signs of a seismic shift in the role of training in organizations that are in search of better performance. Such trends raise the question: Has the training profession become dangerously isolated from the reality of the high-performance workplace?

Stephen H. Rhinesmith, the chair of the American Society for Training and Development, is a practitioner of many years' standing. He asks, "Is it possible that a substantial part of what we've learned in the past will not be helpful in the future? To what degree will we have to reinvent our profession?"

With fewer than 2,000 days remaining until the year 2000, those are appropriate questions.

Post-war corporate America was dominated by engineers and accountants. Trainers often had to fight for legitimacy. Some of the profession's methods, based on individual and group psychology, pitted practitioners against key parts of the organization. The conflict was stereotyped as a war of "feel-goods" against bean counters. Training faulted the organization for its treatment of people and for its focus on bottom-line results. As the profession matured, it sought to be independent from staff and line units.

Over the decades, training and development methods gained a hardwon acceptance. Whether they "worked" was a matter of debate. But in the end, the question became irrelevant, as long as the mass-production economy carried everything along on its rising tide.

The challenge

In the 1980s, with the advent of serious overseas competition, the rules began to change. Suddenly production efficiency wasn't enough to make a company competitive. Customers demanded high-quality products and services that were customized, convenient, timely, and delivered with speed at the right price. By the end of the decade, customers were also demanding that the makers of those goods and services be socially responsible toward the environment and respect differences among people.

Thus began an era of rethinking virtually every aspect of doing work, using technology, and increasing human capability in the workplace. The early 1990s gave us restructuring, reengineering, reinventing, and a host of other attempts to build business anew. Out of this upheaval emerged the high-performance work organization—a catch-all phrase for companies in constant search of better results. For trainers, that should have signaled an important message: Shift your focus from training and development activities (input) to the performance of individuals and organizations (output).

Some training organizations made this conceptual shift. Bell Atlantic, for example, in 1993 transformed its corporate training and education function into a pared-down performanceenhancement organization.

Other training units have had their focus changed for them by top management trying to move the organization to higher levels of performance. Cost-cutting, downsizing, restructuring, and other efforts to boost organizational performance have taken their toll on training departments. In a Training & Development magazine survey, 55 percent of trainers who responded work in companies or departments that were reorganized or restructured in the past year. Eighteen percent of the respondents changed jobs or careers, and 4 percent were unemployed.

The way trainers respond to the performance needs of organizations often reveals a profession that has marginalized itself. By becoming a profession, with its own standards and language and beliefs, training and development set itself apart-a move that was both good and bad for its future. Unwittingly, it fell into the very trap its members eventually began to warn their aging client organizations against-believing so strongly in its own way of operating that it failed to see the need to change in response to a new environment.

The challenge, as Rosabeth Moss Kanter has said, is to reinvent the profession to take advantage of the prominent role of learning in highperformance work.

What is high-performance work?

The notion of high-performance work is certainly not new. Current high-performance systems and approaches have evolved from the many that preceded them. The exact route to high performance is different for each organization, but some traits are common among high-performance companies, according to economist Anthony Carnevale, who has analyzed highperformance work practices extensively. Work is done by customerfocused teams. Employees have high levels of skill variety. The organization is actively engaged in managing change. Collaboration is the norm inside and outside the organization. And technology is important in accomplishing work.

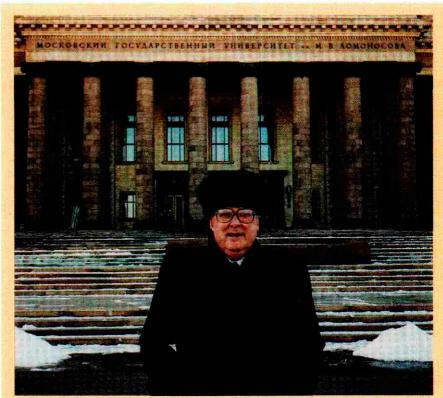
"To date," says Carnevale, "our experience with organizations that are meeting high-performance standards suggests that four factors are necessary: new flexible technologies, new 'high-performance' organizational formats, a highly skilled and autonomous workforce, and collaborative labor/management relations. In addition, change-management techniques are required to integrate these new flexible technologies, work processes, and workforces.

"The essential lesson in all the analysis of high-performance systems since Taylor is that no high-performance variable suffices. What matters is the particular combination of practices, as well as the context in which they are applied. Everything has worked somewhere, sometime, but nothing works everywhere all the time."

This is the heart of what the training profession must face: The solution to performance problems is not always training, and training does not work everywhere all the time.

In fact, there is even a question about whether old-style training works at all, when measured against the goal of achieving sustainable results. Reports from various sources indicate that, despite giving more attention to performance improvement, most companies still experience a human performance gap.

In a survey of 400 executives worldwide, Kepner-Tregoe found that nearly 59 percent reported undertaking three or more major performance-improvement projects in the preceding 18 months—more than one every six months. One out of three of the responding executives spent more than \$5 million on major



Consultant Steve Rhinesmith brings lessons in change management to Moscow and learns a few lessons bimself.

The Limits of Our Knowledge

By Stephen H. Rhinesmith, president of Rhinesmith and Associates, Palmer Landing 506, 123 Harbor Drive, Stamford, CT 06902; 203/327-7988.

Yee been working in Moscow every other month for the last eight years—first to develop a relationship between people in the United States and people in the Soviet Union, and recently to bring change theory and practice to people trying to move to a free-market economy.

One day I received a call from someone in Mikhail Gorbachev's office.

"There is nobody here who really knows much about managing change," the caller said. "We have been managing stasis for so long. We think it would be good for you to sit down with Gorbachev and help him think systematically about change. But first, we would like you to describe on paper what you would say to him."

It was a cold January night in Moscow, and the wind was blowing through my room. I sat down and put a blanket over my lap. I had a pen and paper ready to write down what I could distill for Gorbachev from 20 years of experience in doing organization development around the world.

After a long while, the paper was still blank. I closed my pen, put away the paper, and went to bed. I realized I didn't have anything to say to Gorbachev. He was leading a political and social revolution that encompassed the entire Soviet Union. But more than that, the technology I had was to help people change around the edges—the 15 percent that changes, while 85 percent remains stable. In Russia, 85 percent of the society is unstable and 15 percent is stable.

I did think about what Gorbachev could do. I figured that there were about 27,000 enterprises in the Soviet Union and that each one would need an OD specialist to help with the transformation. So right off the bat, you're training 27,000 OD specialists who will have to transform 500 million people. The arithmetic was humbling. It made me realize that there are areas of the world where our methods just won't work. improvement efforts in the previous five years.

A Training & Development magazine survey shows that the number of trainers involved in performancerelated training has increased in the last two years. Twenty-two percent more people are doing change-management training, 19 percent more are teaching basic skills, 18 percent more are doing customer-service training, and 17 percent more are doing team building or team management.

A Conference Board report claims that 98 percent of the companies that responded to a Conference Board survey reported a need to gain more productivity and higher performance from their workforces. Respondents said their companies experienced a productivity gap, "despite training and development programs."

So, if more training and development isn't the answer to performance improvement, what is?

Most people would agree that the solution lies in applying the right combination of factors to a company's specific business situation and integrating those factors into a system that supports performance. And any system that addresses performance in today's workplace is bound to look beyond traditional training practices—to consider new developments in learning theory, the application of new technology, and the management of change.

The role of learning

A constant in all of the practices needed for high-performance work is the ability to create, extend, and apply knowledge—what we commonly mean by workplace learning.

In the new organization, learning has become everyone's job, and the preferred outcome of that learning is constantly improved performance. As a result, companies are concentrating on learning in a way they never have before—as a performance tool.

Learning is integrated into all key aspects of the high-performance workplace: applying new technology, transforming the structure of an organization, working in teams, managing a diverse workforce, meeting customer needs, making continuous and radical improvements, and delivering sustainable results.

Michael Marquardt and Angus Reynolds state in *The Future of the Global Learning Organization* that "much of the value-added of the organization will come from special learning and communication resources responsible for guiding the organizational knowledge-development process.

"Organizational learning will be highly regarded, as will contributing to the knowledge-development process of the organization. It will be one of the main ways in which performance and compensation will be judged."

A new learning environment

A look at trends in business, technology, and training reveals a picture of dramatic change in the environment for learning in the workplace.

• The focus of learning activities is shifting away from isolated skillbuilding and information transfer, moving instead to performance improvement and support.

• The focus of learning models and methods is shifting from the teacher to the learner.

• More learning is occurring just-intime and directly in the context of a job or a task.

• Self-directed learning and team learning are increasing.

• Group training events are being used less to transfer information or teach skills, and more to motivate, to bond groups, to generate knowledge, and to clarify direction, values, and purpose.

• Learning is more likely to occur with the help of some form of technology.

The familiar pedagogical model of learning faces serious challenges in the workplace. Newer models account for the way people learn in the context of work, by interacting with others, and through experience.

"In the past," explains Martha Gephart, senior vice-president for research at ASTD, "it was often assumed that knowledge resides in the individual brain, that it can be transferred, and that formalized knowledge is the most desirable kind. Recent research has transformed the understanding of individual learning and led to greater emphasis on group and organizational learning."

A group of theories, called situated learning, rejects the notion of individual knowledge and argues that all knowledge is constructed socially within communities of practice. According to such theories, learning is a process of becoming a member of a community.

The motivation to learn is the motivation to become a member of the community. Becoming a member of a community is the process that builds understanding. This is the sense in which high-performance companies are communities of conscious and continuous learners.

Learning communities are social settings in which the members of a group are cooperatively interdependent. Members of the community enhance their collective capacity for action. Learning communities are characterized by shared vision, systems thinking, and team learning. Members focus their personal energies. Together they create experiences through which their perceptions and assumptions are examined and modified over time.

This is not the focus of most workplace training programs, which stress short-term activities, trainer-led instruction, and skills transfer. "Such programs," says Gephart, "no matter how well-designed, are not a good answer to performance problems."

The push from technology

Another development that is supercharging the link between learning and performance is the creation of what has been called the information superhighway.

Digital electronics, optical data storage, portable computers, and distributed computing (internal and external networks) change the way information is created, stored, used, and shared, reducing the need for hierarchy. Such applications are critical to the exchange of information and the creation of shared knowledge among members of learning communities. They also cut training costs and eliminate the need for stand-up instructors.

At Pacific Bell, for example, an interactive multimedia program, called Employee Knowledge Link, trains employees about the company's products and operating procedures. Using digital networks, the system can deliver training materials made up of text, graphics, photographic images, audio, and motion video to 300 workstations scattered across California.

Motorola has transferred its "six sigma" quality training to a CD-ROM format. One course, mandatory for all employees, was once taught by instructors. Now it has been cut from eight hours to six-and-a-half hours, and it is delivered via CD-ROM.

More and more work is aided by some form of technology, and the technology itself serves as the medium for instruction in the work it is supporting. The pairing of work and learning in a common technology encourages companies to question the cost and effectiveness of classroom training and the control of instructional delivery by trainers. For example, the Loewen Group discovered that it was efficient to use informationsystems technology to train people in an accounting program that would be delivered by that same technology.

The new flexible technologies favored by high-performance work organizations are changing the nature of trainers' work. Caitlin Curtin, who runs Luminare, a new, fast-growing company in San Francisco, is an example of a smart training professional who saw those changes as a market niche and jumped in. (See the box.)

Curtin set out to design computerbased training on a free-lance basis but quickly found clients who needed help implementing new, high-performance technology. Her multimillion-dollar company now has eight full-time employees and a network of 35 consulting specialists in human-interface design, programming, instructional design, technical writing, and video production.

"My business has evolved to be 30 to 40 percent designing technologybased training, but 60 to 70 percent developing sophisticated performance-support systems that don't involve training.

"I've had to learn a lot about software development in order to think about whether I can provide an effective performance-support system

Building a Future in New Media

In a funky, high-tech office beside the ramps to the Oakland Bay Bridge, 30something Caitlin Curtin runs a fastgrowing business called Luminare. She employs eight people full-time and uses 35 consulting specialists. How did an instructional designer become a successful entrepreneur in San Francisco's hot multimedia gulch?

"I lucked out," says Curtin. "I was in the right place at the right time with the right skills." Though she doesn't say so, her shrewd market sense also played a big part in her success.



Curtin studied international relations in Luminare's Caitlin Curtin moved school and for a while thought she from instructional designer to wanted a career in film or television pro- performace-support entrepreneur. duction. She was going through a master's

degree program at San Francisco State in educational technology, where she happened to have a teacher, James Laffey, who was working at Apple Computer. "He turned me on to interactive videodisc and computer-based training. Pretty soon I was immersed in all kinds of new media. That was unusual in the early eighties."

Curtin started her company in 1986 with a modest vision-to design computer-based training. Before long, most of her clients were seeking her help in implementing new technology, and she made an astute shift in the focus of her business.

"It became apparent that this was a large market with very special needs, and my professional background made me well suited for it.'

Today Luminare still designs technology-based training for clients, but 60 to 70 percent of its business is developing sophisticated performancesupport systems. Its revenues in 1994 were in the millions of dollars; already Curtin is looking for larger office space.

and whether that's a good choice.

"I need to know how performance-support systems work, how much they cost to develop, what kind of people are involved, how long it takes, and how to manage the software-development process. It's an entirely new skill set and one that many training managers will need in order to function in a high-performance environment."

Curtin also notes that performance-support systems are developed by teams, not individuals. "It's much more of a collaborative process." She views this as a potential challenge to trainers who are accustomed to developing training independently.

Managing perpetual change

The practice of training is not the only part of the profession affected by the shift to high-performance work. In fact, the demands on organization development theory and practice are now probably even greater than the demands on training. That's because of the pressure that companies feel to achieve better performance.

The speed and scope of change is challenging even the most seasoned change-management specialists. Many are finding that the classic change model—moving purposefully along a path from a current reality to a future goal-doesn't provide the state of perpetual responsiveness that organizations really need. And some experts, including Stephen Rhinesmith, are finding that even proven methods have their limits if the scale of change is vast enough. (See the box, "The Limits of Our Knowledge" about Rhinesmith's experience with change in the former Soviet Union, on page 23.)

One of OD's leading practitioners and thinkers, W. Warner Burke, of Teachers College, at Columbia University, believes that "What we know about organization change is becoming insufficient. We need to know far more about such areas as how to maintain the momentum of change, how to help people deal with the chaos they experience during a transition, and how much and when to communicate about change."

So now what?

The standards of performance set by the global economy require new ways of working, new ways of organizing work, and new ways of thinking and learning about work.

All of those changes mean one thing for the trainer: It's time to take a close look at how the training and development profession will contribute to the high-performance workplace, and what trainers will be doing there.

Mat Juechter, the CEO of ARC International, based in Englewood, Colorado, believes that training is stuck in phase two, or the normative phase of the organizational growth cycle. He notes that "Training's frame of reference is built on the assumption that it should focus on itself and not on outcomes. That kind of training is not a change agent; it's a reinforcer of norms.

"Our activities need to become much more integrated with the change processes that are going on in organizations, so that we become resources that line people can use positively."

That is more or less what has happened at Bell Atlantic. In 1992, CEO Ray Smith asked the corporate training unit to look at alternatives to traditional training that would increase training effectiveness. The alternative the department finally came up with led to disbanding the Training and Education unit and regrouping as the Performance Enhancement organization.

"We decided we would stop focusing on training as an end in itself," says Nancy Clapp, director for instructional-systems support at Bell Atlantic, "and start focusing on performance."

Share Your Viewpoint

What should a training professional do to be sure of being of use in the new high-performance organization—one that is based on learning, measured by performance in the global marketplace, and improved by continual change?

In the coming months, ASTD and *Training & Development* magazine will be looking in more depth at some of the questions raised in this article. If you are a pioneer in a high-performance work organization, we hope you will share your experiences and your wisdom. If you wish you were a pioneer, we hope you will share your expectations for the future of the profession.

In upcoming issues, *Training & Development* will publish opinions, comments, and case histories about reinventing the profession for the high-performance workplace. Send your contributions to "Reinventing," ASTD, 1640 King Street, Box 1443, Alexandria, VA 22313-2043. Or reach us at astd@capcon.net via the Internet.

The new unit wanted to do "the absolute minimum amount of training required to make people proficient in serving the customer. We wanted to deploy a much broader range of interventions."

When training is required, the Performance Enhancement organization now focuses just on front-end analysis and training design and development. Training delivery is handled by the business units, which take subject matter experts from the field to train other employees.

As the training organization shifted focus from main-line training to performance support, 194 positions were moved or eliminated.

New roles

The changes required in training organizations are likely to mirror the changes in organizations trying to survive in a high-performance world. Every ounce of attention will go to performance. Technology will be an essential tool. Teamwork and collaboration will be the norm. And continuous change will be a way of life.

To respond to these challenges, HRD specialists will have to make many of the same changes they already support in others. They will have to expand their repertoire of skills, rethink their roles in relation to high performance, and form relationships with a new set of customers—people who own performance problems.

As organizations incorporate new views of learning, and as learning becomes everyone's job, the trainer's and consultant's roles will undoubtedly change. Some of the work will migrate to other people in the organization, and some will certainly disappear.

To add value in a high-performance organization, training professionals will have to make a conscious shift from being agents of skill building and information transfer to being supporters of performance. So says Carlene Reinhart, a consultant based in Vienna, Virginia, who helps companies solve their performance problems.

"Trainers can't afford to focus on training; we have to look at people in the context of their jobs—people who have learning and performance needs. We have to consider the learning experience plus the work environment. We have to fight the tendency to do what we already know how to do. And we have to stop assuming that we know what people need and that what they need is always training."

Some people think the trainer is likely to take on the role of learning manager or architect of learning systems, rather than continuing in the role of a hands-on teacher and process facilitator.

Process-redesign and quality consultant Richard Chang says, "Perhaps we will stop being a profession that delivers learning to others and start being a profession that puts our methodology in everyone's hands the way quality-improvement methods and tools are being deployed in organizations."

Paul Elliott, vice-president of human-performance systems at RWD Technologies, located in Columbia, Maryland, believes new roles for trainers will evolve as corporate management revisits the training function.

"The focus will shift toward people who can orchestrate a series of interventions, including training, within line operations, to improve performance," Elliott says. "Simply depositing information into workers' heads will no longer be sufficient justification for trainers to maintain their positions. Rather, the application of knowledge within the context of the work environment-to help the organization achieve its goalswill become the dominant thrust for people who want to maintain their role, particularly if they want to have any influence in the organization of the future."

New skills

To add value in the high-performance organization, trainers and organization development specialists will need some new skills.

Trainers will have to update their knowledge of learning models and will have to know how to incorporate them into performance-support systems, advises Martha Gephart.

"That means understanding that job performance occurs within a system of goals, measurements, incentives, skills, consequences, feedback, and a host of other factors. It means knowing how to structure work so that it facilitates communication and collaboration that allows people to capture what they know and share it with others. It means being able to install systems that permit people to recognize unconscious learning and to question tacit assumptions."

Stephen Rhinesmith predicts that the new OD practitioner will have to balance knowledge of the social sciences with knowledge of open-systems theory, structural and functional analysis, cybernetic theory, doubleloop learning theory, chaos theory, and other science-based theories.

Skill at planning and facilitating movement from a vision to an action plan to some new form of stasis will remain relevant, Rhinesmith says, "but the more challenging task will be to manage continuous change and create organizations that are continuously responsive."

As for trainers, he says, "they will need to balance their orientation

"These Changes Are Already Happening"

By Ann Meier, a program designer with General Mills Restaurants, in Orlando, Florida. Meier sent her comments over ASTD Online, in response to a request for feedback on reinventing the profession.

"Glad to see this information here (on ASTD Online). It needs to be everywhere.

"In some companies, these changes are already happening. Organizations are demanding new and different training and delivery methods without even knowing just what it is they want.

"These changes won't come gradually, either. We stopped doing classroom training for our largest internal customer five days after we moved into a beautiful new training center with four kitchens, four computer labs, and five classrooms. These types of changes cause major upheavals on the way to new and 'better' futures. Keep sounding the wakeup call!"

toward people and their grounding in the behavioral sciences with hard knowledge about achieving business results."

Technoliteracy is an absolute requirement for operating in the high-performance environment, says Caitlin Curtin of Luminare. Performance-support tools and information networks—both critical to high-performance work—require sophisticated knowledge of current technologies and a vigilant eye toward their future.

"As a training manager, your responsibility is to pick the best strategy, given the business situation. That may or may not involve technology, but you must be very familiar with a lot of different choices to be able to make that decision. You also need to understand the ramifications of your choice and what it will take to support a system after it's installed."

The shift from face-to-face training to delivering information, skill, and knowledge during the performance of work will require trainers to be familiar with many delivery technologies, says Paul Elliott.

"This will require people to be familiar with just-in-time delivery systems, but also with technologies that can deliver information to homebased workers or during off-hours.

"It's not just a matter of mastering the hard technologies of computerbased training and computer-hardware delivery systems. Even more important will be the requirement that trainers be familiar with performance technologies—how to analyze performance by looking for the causes of performance deficiencies, how to design many types of interventions that support performance, and how to evaluate their impact on performance. These are the key technologies for the future of the training community."

Unanswered questions

The reality of the new economy and the quest for high performance opens many doors, but it also raises many questions. Where do HRD professionals fit into the globally engaged, performance-focused organization? Will the training department and the corporate classroom be quaint artifacts of the late twentieth century? Will the roles of learning architect and learning manager be claimed by others? Will technology displace the trainer by being able to foster the relationships that trainers are so good at facilitating face-toface?

As the century winds down and the workplace presents so many obvious challenges, it is time to reframe current thinking about the profession and about its relevance to high performance. To paraphrase Socrates, the unexamined profession is not worth practicing. ■

Patricia Galagan *is editor of* Training & Development *magazine*.

To purchase reprints of this article, please send your order to ASTD Customer Service, 1640 King Street, Box 1443, Alexandria, VA 22313-2043. Use priority code BYM. Single photocopies, at \$6 each, must be prepaid. Bulk orders (50 or more) of custom reprints may be billed. Phone 703/683-8100 for price information.