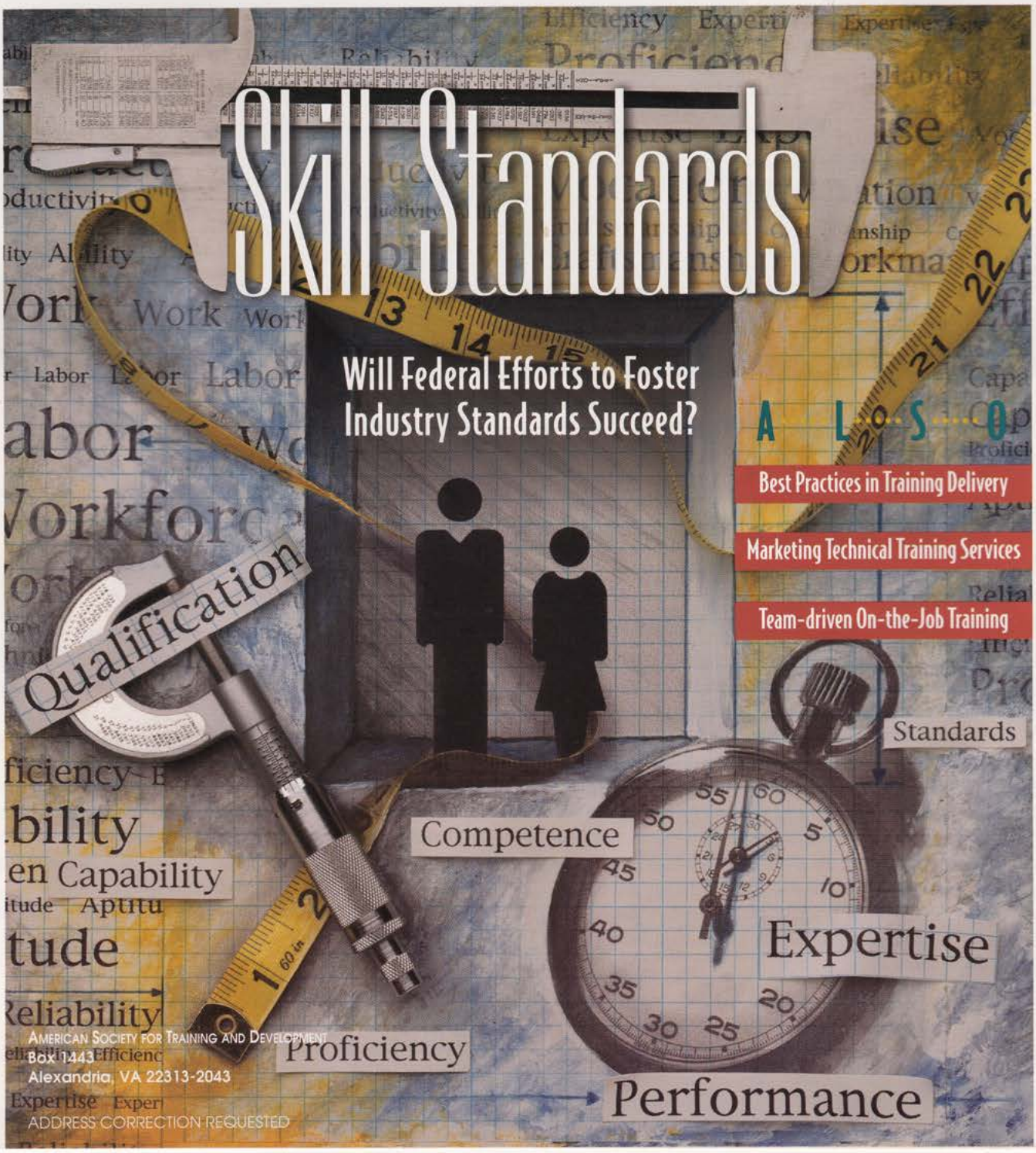
OCTOBER 1996

TECHNICAL & SKILLS TRAINING



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By Tom Barron

Skill Standards

A Federal Initiative Gathers Momentum

Slow getting off the ground, a federal drive to create a national framework of voluntary industry skill standards is picking up steam. But while it counts key industry, labor, and education groups among its supporters, the initiative faces numerous obstacles.

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A federal initiative to foster voluntary skill standards among U.S. industries is beginning to build momentum as well as support from a variety of business and education groups.

The effort, part of a set of laws enacted in 1994 aimed at improving U.S. competitiveness, would create a body of competency standards for all manner of skilled occupations. Doing so would establish a baseline of workforce skills needed to ensure U.S. employers of a qualified, competitive workforce, say proponents of the initiative.

At the same time, industry-wide standards would provide workers with 'portable credentials' in moving from one occupation to another—even, in theory, when jumping to a new career path in a different industry. A workforce more able to adapt to changing economic realities would result.

The National Skill Standards Act, also known as 'Goals 2000,' and a second education-related bill, the School-to-Work Opportunities Act, were enacted by Congress in 1994 to address what many experts perceive to be a widening gap between secondary education and changing workforce needs. The legislation created a board of industry, education, labor, and community representatives to spearhead a drive to distill and codify specific

skills needed for various occupations, providing a clear target for educational administrators in setting school curricula. After a year of Congressional delays in appointing its members, the 24-member National Skill Standards Board convened last spring to take on the ponderous assignment.

"We were a bit late getting started," admits NSSB Chairman James Houghton, former chairman and CEO of Baldrige award winner Corning Inc., who heads up the ambitious effort. A quickening pace of board activities in recent months, including public hearings, focus groups, and a September forum in Chicago are helping to make up for lost time.

Profound Implications

Federal efforts to foster industry skill standards actually pre-date the standards board. In 1992, the Education and Labor departments awarded nearly $5 million in grants to trade associations and education groups as seed money for identifying critical skills in 13 separate industries. Another nine pilot projects were launched the following year with an additional $6 million in federal funds. Those projects, which yielded voluntary skill standards for dozens of occupations, ranging from electronics technicians to retail sales associates, are the laboratory specimens the NSSB will use in its attempt to fashion an umbrella of industry-developed voluntary skill standards.

The implications for technical training are profound, observers say, particularly because many of the occupational areas that are ripe for standardization involve technical skills. Skill standards "will make it far easier for training programs to align their training with what's truly needed in the workplace," says C.J. Shroll, project director for two of the skill standards pilot projects that received federal funding through the National Coalition for Advanced Manufacturing.

The American Society for Training and Development has been working closely with NSSB to provide input on employee

Cover Photo: William Dempsey

The Making of an Industry Skill Standard

Industry groups have taken different approaches to developing skill standards for relevant occupations. But each effort is an attempt to boil occupations down to a critical set of functional skills. Electronics technician skill standards developed by the Electronics Industries Association (EIA), which developed standards for two entry-level electronics technician occupations under one of 22 federally funded projects, provides a good example of one such effort.

The EIA established a national committee of more than 200 workers, supervisors, administrators, executives, and educators from some 100 member companies, together with input from government agencies, unions, and related industry associations in developing its standards. Those participants took part on one of four teams that explored various aspects of electronics technician job functions. Once a set of draft standards was agreed upon, EIA surveyed more than 1,500 employers, union representatives, and educators to solicit feedback on the standards.

The work performed by many electronics technicians, although broad in scope, revolves around a finite number of activities," the committee notes in its report. "The standards are based upon a detailed analysis of the duties an electronics technician is expected to perform and a breakdown of each duty into the specific tasks required for its performance."

The committee began by grouping eight basic "duty areas" that make up the set of critical skills needed by entry-level electronics technicians. Here's a list of skills called for under the standards' "maintenance tasks" duty area, which covers maintenance of electronics testing equipment:

- ▼ Clean electrical connections.
- ▼ Calibrate as required.
- ▼ Tune process instrumentation and control systems.
- ▼ Clean or replace filters.
- ▼ Test for correct operation.

Another section of the EIA's standards specifies a set of technical skills needed for each of eight separate electronics areas—everything from AC circuits to microprocessors. The standards estimate the number of training hours necessary to train an individual with entry-level skills to perform tasks under each of those areas.

Other industry skill standards are similar in structure, a surprise considering that each effort was pursued independently. "Each project was allowed to take whatever form necessary," notes C.J. Shroll of the National Center for Advanced Manufacturing. "But when you stand back and look at them, you find more similarities than differences."

training issues related to skill standards development. Members of ASTD also have played an active role in many of the industry groups that are seeking to establish national skill standards.

"A significant portion of our membership is involved in efforts to create an assessment system for training, and skill standards clearly would help in that effort," says ASTD President Curtis Plott. "But whether [the board] can create a system with the flexibility needed to keep pace with changing skill needs is another matter." Keeping standards current and convincing industries that skill standards are a "critical business success issue" are among the toughest challenges facing the NSSB, Plott says.

Seed Money

Several states have been active in pushing development of industry skill standards, and industries such as construction have well-developed skill standards systems already in place. The purpose of the federal effort is to establish a national framework that would create consistency and 'cross-functionality' among various industry systems, in the words of one observer.

Seeking to further the pool of industry work done thus far, NSSB recently awarded $1.7 million to 11 organizations to continue development of skill standards already underway. That money and future allocations—the board has a budget of $4.5 million this fiscal year—will be used to help seed skill standards efforts among various industries while the board toils to create a national framework, and eventually, an assessment and certification system to support it.

"Hopefully, we can create some 'standards for standards' that can be used to develop an assessment and certification system," says Houghton, who is widely admired in industry circles for his management prowess and consensus-building skills. That system "might look like a Baldrige-type certification—or even a *Good Housekeeping*-style seal of approval," he says. Whatever the board settles on will be strictly voluntary for both individuals and companies, Houghton emphasizes.

The latest round of funding included $279,000 for the American Electronics Association, which is developing curricula that can be used by companies to train employees to meet skill standards that it developed for four electronics industry occupations.

"We wouldn't be able to do this without federal funding," says Cheryl Fields Tyler, AEA's director of workforce quality who oversees the industry group's standards-setting effort. "The seed money coming from the board is essential to get this effort off the ground."

But beyond doling out funds to industry associations, what role does the NSSB envision for itself in the effort to develop skill standards? "I sort of liken our role to that of a cheerleader," says Houghton. "A lot of people view this as a federal program, but frankly we don't have enough money to call ourselves one. Private industry has to take the lead role, and our job is to be a catalyst in the effort. One measure of our success is how good we are at persuading industry to develop skill standards," he says.

AEA's Tyler has a similar take on the board's role. "I think the most important role the board can play is that of a marketing-focused entity—one that markets the value of skill standards to the private sector," she says. "Proving the value of skill

standards to the marketplace will be its real challenge," she predicts.

The board's first defining moment will arrive in December, when it presents a report to Congress that will constitute a road map of its plans to construct a framework for voluntary skill standards. Annual status reports will follow thereafter.

"Clustering" Challenge

Before it can assume the role of cheerleader, however, the board has to firm up a national framework of occupational clusters from which to hang various industry skill standards. If it succeeds, the clusters will group occupational skill standards both into industry categories and, in many cases, into occupational competencies that intersect numerous industries. Bob Hofstader, who heads a pilot skills standards project with the American Chemical Society, explains the distinction.

"In our field, laboratory technicians come in all stripes and colors as far as their specialties, but the bottom line is that they're all lab technicians, and about 60 percent of their skills are generic to lab technicians," he explains. Those baseline skills are needed whether the technician is working in a pharmaceutical laboratory or a petrochemical laboratory, which demonstrates their cross-industry validity, he says. For more generalist occupations, such as an administrative assistant, there's a much greater percentage of generic skill crossover among industry clusters.

The clustering issue is seen as one of the knottiest challenges facing the board, and a July meeting in Washington, D.C., to address alternatives demonstrated the complexity of the issue. Some observers question whether the board shouldn't simply adopt an existing occupational classification scheme—like that used by the Department of Labor's Bureau of Labor Statistics (BLS.)

"There are a lot of different coding structures already in existence that they could draw from very quickly," notes Ronald McCage, executive director of a Decatur, Georgia-based nonprofit consulting group that played a role in three federally funded industry skill standards projects. Borrowing from the Labor Department's Standard Occupational Classification System, a separate system used by BLS and a third set of classifications developed the Department of Energy, "You can come up with 12 to 16 major industrial and occupational groupings that encompass virtually everything," McCage argues. Others agree that the board has bigger issues to settle and shouldn't get bogged down in developing its own clustering scheme.

Keeping standards current and convincing industries that skill standards are a "critical business success issue" are among the toughest challenges facing the NSSB

But key to creating a national system of skill standards is moving away from job titles and relying instead on functional competencies, says Houghton. "There are some very good models out there that will certainly be helpful in our effort," he says. "But we're trying to get beyond job titles, which differ from industry to industry."

"I think there are three or four solutions out there that have validity," notes AEA's Tyler. "It's important for the board to pick one and go from there—to keep things moving," she says.

Sundry Hurdles

Cajoling industries to develop and, more importantly, embrace skill standards is seen as an even weightier hurdle facing the board. While some industry groups have energetically championed the skill standards concept, others have been slow to warm to the initiative. Observers say the board must choose carefully when providing funding to organizations to develop the standards.

"I believe our standards will have a long life and broad buy-in because we developed them ourselves," says Bob Hofstader of the American Chemical Society. "The same isn't necessarily true of standards developed for an industry group by an outside consultant," he warns. The sentiment is shared by other stakeholders who note that creating skill standards is a far cry from adopting them.

Another concern is that a system of skill standards be inclusive—and not limited merely to larger firms that can more easily afford to attain them. While professing support for the concept of skill standards as a tool to improve U.S. competitiveness, industry groups including the National Association of Manufacturers caution that standards shouldn't be beyond the reach of smaller companies.

"We support this 'common language of jobs,'" said NAM Senior Policy Director Phyllis Eisen in testimony to the board last July. However, she added, smaller companies "share with us their concern that the bar will be set too high." NAM represents 14,000 companies, a majority of them small- to medium-size businesses.

To the contrary, AEA's Tyler says that smaller companies "have the most to gain" by the standard-setting initiative. While large firms have the resources to develop skill standards on their own, an industry-led, government-supported effort allows small firms to reap the benefits without adding to their costs, she says.

One essential element of buy-in—union support—seems to be settled. National union representatives have endorsed the concept of skill standards, and representatives from several unions sit on the NSSB. Among them is Paul Cole, secretary-treasurer of the New York State

chapter of the AFL-CIO, who serves as one of three vice chairs on the panel.

"Unions' primary interest is in promoting a high-skill, high-wage economy, and the development of a system of skill standards will help achieve that," says Cole. The challenge for both labor and management is in integrating a system of skill standards into work systems that are primarily seniority based, he says. "That's something that would be the subject of negotiations in individual settings."

The solution to the skill versus seniority dilemma, pioneered in the construction trade, which has long used its own system of skill standards, is a two-tiered system of "pay-for-knowledge" and "pay-for-time," says Cole. The method used by the Association of Builders and Contractors, which represents unionized labor construction firms, "is a perfect example of a combination of the two," he says.

Beyond the details of implementing a system of skill standards is a growing realization by both labor and management that they have a "common goal to succeed in a global economy," Cole says. Facing increased competition from beyond U.S. borders, "There's much greater interest in getting to 'yes,'" he notes.

Keeping Standards Current

By far the biggest challenge facing the NSSB, one that has dogged standards-setting efforts dating back to the guilds of medieval Europe, is developing a system to keep skill standards up-to-date. To critics of the initiative, creating a system of skill standards that aren't obsolete before the ink dries will be the true test of success.

"That's the real nut," acknowledges Houghton. "If we can come up with a way so that these standards can be constantly revised, we'll really have outdone ourselves." Because industries are taking the lead role in developing standards, and have an incentive to keep them current, the task may not be as difficult as it seems, he adds.

> Creating a system of skill standards that isn't obsolete before the ink dries will be the true test of success

The quality of skill standards developed by various industries will weigh heavily on success of the effort, other observers note. Standards "shouldn't be so broad that they can't be applied practically, nor so narrow that they're useless to individual employees," argues Roger Ingram, director of research and development for the Alliance for Employee Growth and Development, a cooperative training venture funded by AT&T, Lucent Technologies, and two union organizations representing electrical and communications workers.

The Alliance, which has developed pilot skill standards for telecommunications industry occupations, created a system of task forces to keep those standards current with changing technologies. "If you can figure out a way to update standards in this industry, you can do it anywhere," Ingram quips.

Muddling of Issues

Observers say the board may just be able to accomplish its formidable task, provided its efforts aren't sidetracked by competing educational priorities. Ronald McCage, whose organization, V-TECS, has been involved in analyzing industrial occupations for the past 23 years, offers some historical perspective.

"The emphasis in the 22 original projects was to look at skill standards already in place and develop a system for certifying and creating portable credentials," he recalls. "Then came a change in administrations, and skill standards got connected to others issues like school-to-work, and became seen as a way of driving both education and training. Skill standards can do all of that, but there are distinctly different processes for carrying out each of those components."

"There've been a lot of agendas mixed together," McCage adds. ■

Tom Barron is editor of *Technical & Skills Training.*

Skill Standards Resources

Wondering whether your industry association is developing skill standards? Here are some resources to keep you up to date on skill standards efforts.

Web Sites

▼ National Skill Standards Site (http://www.NSSB.org)
Official site of the NSSB, it includes information on federally funded skill standards projects, details on NSSB activities, and testimony from NSSB hearings.

▼ Employment and Training Administration/Department of Labor Skill Standards and Certification Page (http://www.ttrc.doleta.gov/skillstd.html)
General information about federal skill standards efforts, full-text copies of skill standards and school-to-work legislation, international benchmarking efforts, and other background.

▼ SkillsNet Home Page (http://steps.atsi.edu/)
Information and archives on SkillsNet, a Listserv for discussion of skill standards efforts. The site also features information on various skill standards projects.

Printed Information

The National Skill Standards Board serves as a clearinghouse for information on industry skill standard development efforts. NSSB address: 1441 L St. NW, Suite 900, Washington DC 20005-3521; 202/254-8628.