Bench

EVERYBODY'S TALKING ABOUT

BENCHMARKING, BUT FEW PEO-

PLE ARE DOING IT IN THE AREA

OF HRD. HERE IS A LOOK AT

HOW AND WHY TO BENCHMARK

YOUR HRD FUNCTION AGAINST

THE BEST, WITH A CASE STUDY

INVOLVING THREE BALDRIGE Award winners. IN THIS ARTICLE Benchmarking, HRD Program Evaluation

marking

By Donald J. Ford

A lot of people are writing and talking these days about the benefits of benchmarking. But why should you benchmark your organization's products, services, and practices?

Xerox popularized benchmarking in the early 1980s, and the practice has really taken off in the past few years, especially among manufacturers. As originally defined by Xerox, benchmarking is the continuous process of measuring one's own products, services, and practices against the world's toughest competitors—or those recognized as leaders in the particular aspect you're studying—in order to identify areas for improvement.

Why is there a sudden surge of interest in benchmarking? According to a recent survey conducted by the International Benchmarking Clearinghouse, in Houston, Texas, several factors contribute to the trend.

The Malcolm Baldrige National Quality Award deserves some of the credit. Benchmarking is emerging as an important criteria of the Baldrige. Many companies that have applied for the award have found that their benchmarking processes have been judged inadequate.

In addition, some companies now see benchmarking as a necessary tool for survival because of its proven contribution to improving the quality of products and services. Competitive pressures to improve customer service, time-to-market, and financial performance are driving companies to study world-class firms, learn their secrets for success, and implement those improvements in their own organizations. Despite the upsurge in benchmarking, the spotlight has been focused mostly on manufacturing and engineering issues: time-to-market, cycle time, production costs, and product quality. Those critical issues will no doubt continue to drive benchmarking in most organizations, but we HRD practitioners ought to examine the ways in which benchmarking might benefit our own profession.

Dave Ulrich and his colleagues at the University of Michigan have already done some ground-breaking work. They conducted a large benchmarking study of human resources competencies and practices, which involved more than 10,000 individuals in 91 U.S. firms. Focusing on all HR functions, they collected surveys from managers and employees in many functional areas, measuring perceptions of the companies' human resource departments.

Among the competencies they examined were eight in the HRD domain:

- training program design
- training delivery
- career planning
- career development
- organization design
- autonomous work-group design
- organizational restructuring

• integration of different business functions.

Of those eight, the HRD functions received the best ratings in the areas of training design and delivery, followed by organizational design and restructuring. Career planning and development received the lowest ratings. And compared to other HR functions, HRD received mediocre ratings: worse than staffing, communications, and performance appraisal, but slightly better than compensation and benefits.

Although these are very important data they are based on individual perceptions rather than empirical fact. The problem with benchmarking that is based solely on perceptions is the inherent biases of such data and the lack of guidance in determining how a company can improve. If benchmarking is to be useful to HRD, it must be based on clearly defined and agreed-upon measures of competency and performance that objectively capture the current situation and point the way toward improvement.

How and what to benchmark

At this early point in the development of benchmarking, no single model has emerged to guide prospective benchmarkers. Instead, a variety of competing models exists, encompassing anywhere from four to as many as 11 steps. The simplest models are based on Deming's classic quality four-step: plan, do, check, and act.

For benchmarking, the planning process includes at least two things: a self-audit of the organization to define internal processes and measurements, and a benchmarking plan that includes what is to be benchmarked and who will be included in the comparisons.

The second step—the "do" step typically includes collecting data through surveys, interviews, and site visits. Checking usually involves analyzing the data to determine performance gaps, and communicating the findings to management.

The action step includes establishing goals, implementing specific changes, monitoring progress, and ultimately recalibrating benchmarks in preparation for cycling back through the benchmarking process again. Most experts recommend conducting benchmarking studies at least every two to three years to stay current with the best-in-class. Eventually, like other quality initiatives, benchmarking ought to become a regular part of the way firms do business.

Although experts caution that benchmarking is not synonymous with measuring, the issue of what to measure is clearly one of the thorniest problems confronting would-be benchmarkers. Choosing the wrong set of metrics is one of the surest ways to doom a benchmarking study. A related problem is making comparisons based on measures that have been calculated differently, akin to the age-old "apples and oranges" dilemma.

For example, many benchmarking studies investigate time-to-market, one of the key success factors for flexible manufacturing. But time-tomarket may be measured in many ways. Some companies consider time-to-market to begin at a product's conception; others start the clock at the moment when a new product wins formal corporate R&D backing, which might be years after it was first conceived.

A recent example involving training costs at Magnavox really brought that point home. All division training managers were asked to provide annual training-cost data to the corporate human resources department. When the data came in, corporate staff members were puzzled at the wide disparity in the numbers.

Additional checking revealed the lack of a uniform way of defining training costs. Some divisions counted direct HRD costs only (such as HRD labor, materials, and outside consultants), while others also counted participants' wages while attending classes, which nearly doubled the cost of training.

Before HRD can benchmark in any systematic way, we have to decide how to measure what we do.

The table on page 39 summarizes a series of 14 HRD metrics that firms of any size can use to measure their HRD functions against those functions at other companies. The metrics encompass three broad areas that most HRD practitioners consider essential:

• measures of training activity (how much training and development is occurring)

• measures of training results (how well training and development achieves its goals)

• measures of training efficiency (to what extent training and development maximizes resources in pursuit of its mission).

The beauty of these 14 measures is that they allow comparisons across organizations and industries by controlling for population size, and comparisons over time by converting raw data to ratios or percentages that can be tracked.

Most of the measures of training activity, for example, are based on per capita ratios, such as the amount of money spent annually on training per employee. Once this measure is calculated, it allows any two organizations, regardless of size, to compare their training expenses in a meaningful way. It also enables researchers to investigate whether large firms are able to achieve lower

HRD Metrics			
Metric Name	Metric Type	How To Calculate	Example
Percent of payroll spent on training	Training Activity	Total training expenditures + total payroll	U.S. average = 1.4 percent of payroll spent on training per year.
Training dollars spent per employee	Training Activity	Total training expenditures + total employees served	Three Baldrige winners spent \$1,100 per employee on training in 1990.
Average training hours per employee	Training Activity	Total number of training hours (hours x participants) + total employees served	U.S. average for large firms (100+ employees) = 33 hours per employee in 1990.
Percent of employees trained per year	Training Activity	Total number of employees receiving training + total employee population	Three Baldrige winners trained an average of 92.5 percent of their workforces in 1990.
HRD staff per 1,000 employees	Training Activity	Number of HRD staff + total employee population x 1,000	Three Baldrige winners had an average of 4.1 HRD staff mem- bers per 1,000 employees.
Average percent of positive partic- ipant ratings per year	Training Results: Reactions	Total number of employees rating courses "good" or "effective" + total number of employees who completed course surveys per year	Three Baldrige winners averaged 93 percent positive participant course ratings in 1990.
Average percent of satisfied HRD customers	Training Results: Reactions	Total number of customers rating HRD services "good" or "effec- tive" + total number of customers who completed customer satis- faction surveys	Three Baldrige winners averaged 84 percent positive HRD cus- tomer-service ratings in 1990.
Average percent gain in learning per course	Training Results: Learning	Average percent of learning gain (difference between pre- and posttest) for each class, aver- aged over all classes tested	Three Baldrige winners averaged 70 percent learning gain in more than 50 technical classes in 1990.
Average percent of improvement in on-the-job performance after training, per course	Training Results: Behavior	Average job-performance gain (dif- ference between pre- and post-train- ing behavior) for each class, aver- aged over all classes measured	An electronics firm reported 49 percent improvement in management ratings after supervisor training in 1990.
Cost savings as a ratio of training expenses	Training Results: Bottom-Line	Total savings in scrap or waste + dollars invested in training	A Baidrige winner reported saving \$30 for every \$1 spent on TQM training (for an ROI of 30:1).
Revenues per employee per year	Training Results: Bottom-Line	Total yearly revenues or sales + total number of employees	Two Baldrige winners reported average revenues per employee of \$94,000 in 1990.
Profits per employee per year	Training Results: Bottom-Line	Total yearly gross profits + total number of employees	An electronics firm earned aver- age profits per employee of \$21,000 in 1990.
Training costs per student hour	Training Efficiency	Total costs of training + total number of hours of training	Three Baldrige winners reported \$27 in average training costs per hour of training in 1990.
Billable rate (time on task)	Training Efficiency	HRD staff time spent on billable or key tasks + total HRD staff time	An electronics firm reported an HRD billable rate of .82 in 1991 (82 percent of staff time spent on billable tasks).

per capita costs than small businesses, because of economies of scale. It may even help researchers set suggested training-investment guidelines for businesses of various sizes.

An axiom in business is this: The only thing that matters is what gets measured. So focusing attention on measures of training activity, results, and efficiency should help HRD improve in these three critical areas.

But measurement will only take root in our profession if it is relatively easy to do and produces valuable insights.

A benchmarking case study

To test the metrics listed in the table, I conducted a pilot benchmarking study of the HRD functions at three Malcolm Baldrige National Quality Award winners. I selected Baldrige winners because the award recognizes the best U.S. companies in the quality arena and gives particular emphasis to the role of training. In other words, these companies have been judged to be among the bestin-class training organizations in the United States.

Data on the 14 HRD measures and related information were collected using a custom-designed survey form. The form was reviewed for clarity and content by several HRD colleagues and then mailed to nine companies that won the Baldrige from 1988 to 1991.

(For a copy of the form that was used, write to the author at the address given below.)

A second mailing went out to nonrespondents a month later. Three surveys were returned, including one that was only partly completed. The principal explanation for the low response rate was difficulty in locating the data. Most of the companies contacted apparently were unable to answer the questions. The small sample size precludes characterizing the results as representative, but they provide some indications of the standards of HRD activity, efficiency, and results that world-class training organizations achieve.

Among the more noteworthy findings regarding training activity:

• On average, the respondents spend 4.2 percent of payroll on training, which translates into \$1,100 spent annually on training per employee.

• The companies provide for an average of 40 hours of training per employee per year, delivered to 93 percent of their total workforces.

• The companies report that participant ratings of training results are 93 percent positive.

• The average learning gains are 70 percent.

Customer-service ratings from HRD

A Forum for Benchmarking HRD

Nineteen companies came together at the beginning of 1992 to form the Benchmarking Forum, under the auspices of the American Society for Training and Development and its Institute for Workplace Learning. The project provides a way for the companies to measure and benchmark against each other their practices in the area of training and development.

The founding forum members are Aetna, American Express, AT&T, Amoco, Arthur Andersen & Co. SC, Boeing, Chase Manhattan, Digital, Dow Chemical, ETHYL, Federal Express, GTE, Hewlett-Packard, Honda of America, IBM, Motorola, Pacific Bell, Texas Instruments, and Xerox.

Nineteen additional companies have joined in 1993: Abbott Laboratories, Ameritech, Chevron, CIGNA, Corning, CRA, Cummins Engine, Florida Power & Light, Ford, Hallmark Cards, Kaiser Permanente, MCI, NYNEX, Rockwell International, Tektronix, The Vanguard Group, 3M, US West, and Westin Hotels.

Early steps in the forum's work included the identification of eight areas of training information in which to begin benchmarking: • organization structure of education and training

• financial models of internal education and training

• design, development, delivery, and publishing

- measurement and evaluation
- customer requirements
- facilities
- the training and certification of instructors
- administration and logistics.

Forum members began with the first four areas. They identified metrics and developed instruments to use in surveying their companies on practices in those areas.

Successes have been varied. The multibusiness companies have had to decide which of their businesses to collect data from. Some operational definitions have had to be redefined. And members have questioned the value of certain metrics. But overall response from members to the initial collection phase has been positive.

With data collection completed for the first four areas, a data base was developed. The data base is used for managing the information and for making statistical analyses and graphic representations. Many of the forum companies lack tracking devices for capturing this kind of data accurately and regularly. Members have had to rely on and develop relationships across their organizations in order to collect the data and compile accurate profiles. They are enthusiastic about now being able to identify where and by whom training is carried out in their firms; how much time and money is spent on training; how training is initiated, developed, and offered; and who receives which kinds of training.

The Benchmarking Forum's metric-collection instruments may be useful for others in the training and development field and will be published, beginning in September with an article in Training & Development. Obviously, information about training in some of the world's top companies could also be valuable to other HRD specialists. The forum will release data from its studies-in averaged forms, to respect the confidentiality of the member companies. Within the forum, members have agreed to share information freely among themselves.

> --- Cathrine Fisk ASTD Benchmarking Forum

TRAINERS RELY ON MANAGEMENT'S FAITH IN THE HRD MISSION

customers are 84 percent positive.

• The companies report a cost-savings-to-training-expenditures ratio of 30 to 1.

• Average training costs per student hour are \$27.

Then I compared Magnavox's HRD efforts to those of the three Baldrige winners. It became clear at a glance that Magnavox lags behind in training activity, but appears to be achieving equal or better results than some of the best-in-class training organizations.

That information convinced management that the training being provided is producing excellent results, but that the company simply is not offering enough to affect every employee and every department in the organization. Partly as a result of that data, the corporation decided to increase substantially its investment in training.

Many experts caution that HRD practices vary widely among industries. Many aspects of the practice of HRD are different in, say, a bank, than they would be in a retail store, a hospital, or an aircraft factory. Since the results cited above are based on data from only three industries, it would be premature to draw any conclusions about HRD standards in other industries.

Lessons learned

Despite its shortcomings, that study demonstrates the applicability of benchmarking to human resource development. Appropriate metrics and recommended benchmarking procedures resulted in impressive evidence of the shortcomings and strengths of the company's HRD efforts—which helped management see HRD in a new light.

The study also reveals the measurement problems still facing the HRD field. Of the 14 metrics proposed in the table, the pilot study suggests that 10 are fairly straightforward to measure and calculate, while the other four require considerable effort and so are less likely to be used. Those four are as follows:

- billable rate
- profits per employee

percent of behavior change as a result of training

dollars saved as a result of training.

Of the three training categories activity, results, and efficiency—training activity was easiest to measure. Training results were more difficult to measure, and training efficiency was virtually untracked, even by the leading training organizations studied.

Surprisingly, even some of the best training organizations in the world do not regularly track certain measures:

• the percent of payroll spent on training

• the percent of the workforce that receives training

• the average percent of improvement in on-the-job performance as a result of training

• the amount of money that training saves an organization

• the productivity and efficiency of the HRD staff.

The failure to track such measures suggests that training functions are relying more on management's faith in the HRD mission than on data that prove HRD's contribution to organizations.

Betting the training function's future on the blind faith of management is a risky wager. Sooner or later, a day of reckoning will dawn. If HRD professionals do not begin documenting their activities, results, and productivity now, they will have no one but themselves to blame for any negative consequences. ■

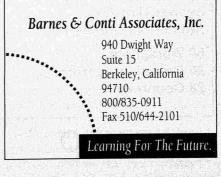
Donald Ford is manager of HRD at Magnavox Electronic Systems Company, West Coast Division, 2829 Maricopa Street, Box B-17, Torrance, CA 90503.

To purchase reprints of this article, please send your order to ASTD Customer Support, 1640 King Street, Box 1443, Alexandria, VA 22313-2043. Single reprints, at \$6 each, must be prepaid. Bulk orders (50 or more) may be billed. Phone 703/683-8129 for price information.



Contact Barnes & Conti today to find out more about the many skill-based learning programs and services we offer for business, industry and government.

In partnership with our customers, Barnes & Conti has proven its flexibility and responsiveness in designing and executing effective programs that deal with change and innovation in today's evolving world marketplace.



Circle No. 148 on Reader Service Card