Accounting Contrary to conventional wisdom, training directors will be spending less time—not more—running studies to determine training's effectiveness. Robert Bove finds out why in this interview with industrial psychologist and author Wayne Cascio, professor of management and organization in the Graduate School of Business and Administration, University of Colorado, Denver.

New-Wave HRD

**Q.** What do you mean by HRD accountability?

A. It seems to me that accountability has different faces depending on what perspective you want to look at. At the most basic level, there's accountability to safeguard the assets of the organization. As *The Wall Street Journal* reported a couple weeks ago, \$30 billion per year in direct costs is spent in this country on training and development activities. It seems that the people who are spending that kind of money at some point have to answer in terms of what they're producing. What are the benefits related to those costs?

**Q.** But are organizations asking for that kind of information?

A. I think the state-of-the-art is not to ask for that sort of information. Evaluators use Kirkpatrick's classic scheme for evaluating training programs in terms of reaction, learning, behavior, and results—increasing levels of rigor—but they often stop at the lowest level, reaction, basically passing around a questionnaire at the end of the training session and asking if people thought they got something out of it. It's participants' reactions, but it's the least reliable indicator of whether or not the training program really did have any longterm benefits.

**Q.** Trainers don't even always pass out questionnaires.

A. True. It's become very clear that there are two forces out there that will continue to exert pressure on organizations to provide more opportunities for HRD, and one of those is the need to control labor costs. One way to do that is to retrain people who are currently on board. The second force is the pressure to keep com-

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petitive. We're in a global economy, and if you're going to stay competitive that means keeping up with change managing change, instead of having change manage you:

Q. If an organization is not asking for this kind of accountability, is it a safe area for an HRD director to venture into and be the first one to bring it up?

A. I think there are two answers. One is that the traditional view of HRD expenditures is that they are expenses to be charged off in the current period. On the other hand, there's a wealth of behavioral science research that is now beginning to show that HRD efforts, if they're done well, produce a stream of benefits that continue to return to the organization over time.

**Q.** What might some of those benefits be? **A.** Particularly in the area of meta-analysis. [See Cascio's Costing Human Resources: The Financial Impact of Behavior in Organizations, the second edition of which will be released by Kent in early 1987.] What that is, is a quantitative procedure for accumulating literature results. Suppose you want to look at the impact of a goal-setting program. Meta-analysis is a technique that allows a person to accumulate all those results and be able to say, on average, by what percentage a goal-setting program improves performance,

**Q.** How would that work in a typical manufacturing firm, for example?

A. Well, the way it's working and why it's exciting is that the guy in the manufacturing organization wouldn't need to do the study. Studies that accumulate results already are available in the selection area—for example, when looking at the validity of various selection procedures ranging from evaluations of past training experience to written tests to assessment centers, background checks, and so forth. Q. So they just have to plug into a study? A. Yes. You take that figure that already exists at the beginning—at the starting point for estimating what the payoffs might be for the organization. The key is to combine the results of meta-analysis, which is being done on a large scale, with a technique called utility analysis that allows us to look at the dollar payback to the firm as a result of HRD activities.

Q. Depending on the kind of executive they were facing, HRD directors would have to have an idea of how meta-analysis worked, wouldn't they?

A. Some. It's a way of estimating what the average result is across many, many studies that have been done—all studies, involving thousands of subjects. In other words, using the example of the legal system, a judge would find it preposterous to even think that he wouldn't rely on precedence in some way. And yet, in organizations, frequently we act as if there are no precedents. And so, what meta-analysis allows us to do is begin to specify, on average, how much of an improvement in job performance we can expect to get from implementing a particular sort of HRD program,

**Q.** Why do you think precedent has been overlooked up to this point?

A. If you look at the federal guidelines on employee selection procedures, for example, you find they require that a validity study be done in each organization separately—even though you might be using a test to select computer programmers in New York and the same test in Chicago and Seattle. The federal government has required separate studies in each instance in each location to show that the test really predicts job performance. And consequently, there hasn't been much incentive for behavioral scientists to look at the degree to which findings might gene alize from one location to the next.

**Q.** Given the impact of the federal gover ment on the whole situation.

A. That's clear, particularly in the elec-

Q. Is this a problem with bureaucr y in general?

A. I don't think you can lay it at the feet of the bureaucracy, because we really didn't have the technology to do this 10 years ago. It's of fairly recent origin at the methods have now been developed of the point that the results are beginning of appear in the professional literature Now

we're at the point where, for example, if the federal guidelines on employee selection procedures were revised, we would argue very strenuously that validity generalization is the rule rather than the exception. O. How would you make the leap from selection to training in regards to meta-analysis? A. In the broader context of the need to control labor costs. One way to do that is to avoid having to go back out into the labor marker and rehire people over and over again to fill slots. Therefore, there's going to be increasing pressure on organizations to provide the kind of training that will keep people up to date, to keep companies competitive. Business Week reported that office workers would probably have to be retrained at least eight times in their careers. That's pretty astounding.

Q. How many organizations are prepared to do that?

A. Not ma y. I think we're on the verge of a very exciting time and what it implies is that there will be a real change in the way HRD departments market themselves. We're going to be moving more towards "look what we can contribute to the organization." Because what these metaanalyses are beginning to show is that the payoff is far larger than anybody had anticipated far greater. Training will come to be viewed as more an investment that'll pay off over time, not just as an expense to be charged off in the current period.

Q. Does this mean that trainers are going to have to get a greater grasp of finance?

A. No, quite the contrary. I'm working with two organizations now that are beginning to implement this on a large scale, in terms of evaluating all kinds of HRD programs in terms of dollar benefits to the organization. But I don't want make it sound like we should just look at the level of dellar benefits; we also need to focus on the long-term impact of changes in behavior as a result of going through an HRD program.

Q. I. no does meta-analysis help you measure the 1. ng term?

A. What meta-analysis will do is to tell you, for example, that as a result of a goalsetting and feedback program, you can expect 15 percent improvement in job performince. Now, you take that 15 percent and ou plug it into a pretty simple equation that is used to estimate the dollar bene its to the organization, after you subtract out the cost of the program. It's probably an exaggeration to say "billions for training and not one cent for evaluation"-but not that much of an exaggeration. The fact of the matter is that, rather than fearing evaluation and accountability, people in HRD really ought to recognize that they have a tremendous opportunity to demonstrate the dollar value of what they're doing. And it's much bigger than most people have anticipated. **Q**. It would be personally gratifying to trainers if they could show that.

A. You see, in the past, a lot of people felt like "Gee, if I want to figure out how my training program paid off, I've got to use control groups, and I've got to use experimental groups." And who wants to be in the control group if the program's really worth its salt? That presented a lot of problems for organizations and really discouraged a lot of people from going forward with trying to demonstrate the value of what they do. What meta-analysis does is relieve the HRD professional of that responsibility because it says ahead of time "Look, if we do this well, this is what we should expect to see in terms of a return-a percentage improvement in job performance."

Q. How does industrial psychology figure in meta-analysis?

A. Well, the technique was developed by industrial psychologists and part of their training includes a heavy dose of statistics and research methods.

Q. We've just passed through a period where the emphasis was on the so-called "touchy-feely" techniques of HRD, and there's nothing wrong with happy employees, but it seems ironic that what's getting us closer to that goal is something that on the surface seems cold and stark; statistical analysis.

A. You're 100 percent right. The other side of it is that it's not good enough for HRD professionals simply to sit back on their laurels and say "I get five dollars" worth of return for every dollar I spend." The broader question exists from the point of view of a firm that's budgeting scarce dollars. How can the HRD professional argue to get a share of those dollars in the same terms as somebody in the production department or sales and marketing? What this utility analysis allows us is to do just that: speak the language of business, which is dollars, and to argue for budgets on the same terms as every other department does.

Q. What kind of companies have HRD departments that compete for budget dollars

this way?

A. AT&T is a well-known example. In an article in *The Journal of Applied Psychology* in February, I described the development and application of a new method for measuring job performance in economic terms—and that's the foundation for utility analysis that allows you to get at payoffs in terms of dollars. The subjects in that study were AT&T managers. AT&T's been a leader in that and they've put four years into the effort.

**Q.** What accounts for the time factor in such a process?

A. What we're doing is trying to develop new methods, new technologies, to be able to demonstrate this. It simply wasn't available previously.

A good case in point: Suppose you're taking something like a career planning program-something closer to the soft end of the scale than to something like learning a new technology to produce microchips. The outcomes are a lot more ambiguous. One of the hardest things to measure is how long the effect lasts- and you need long-term studies to do that. HRD provides a stream of benefits over time and we want to find out how long a time that is.

Q. Some companies, of course, don't experience any benefits.

A. Meta-analysis will only help you to the extent that you do the training well. Q. What can it do in a situation where, through no fault of its own, a training department is going to have to absorb company losses? A. We'd really like to be in a position where management would say they'd cut a lot of other things before they cut training. But typically, it's the opposite; training is usualy the first to get cut when business turns down.

Utility analysis would certainly be a tool to help you make better decisions in a situation like that. It wouldn't tell you exactly how much you need to cut, but it would tell you where you can in terms of the things that are paying off and the things that aren't. And it can help you make better decisions overall, and it can help a company allocate dollars to training instead of, say, to a new plant. Very exciting for the HRID profession.

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