Swanson, R. A. (1989). Everything important in business is evaluated. In R.O. Brinkerhoff (Ed.) New Directions in Program Evaluation - Evaluating Training Programs in Business and Industry. San Francisco; Jossey-Bass, 44, pp. 71-82.

The business environment and culture dictate expectations for economic impact of training that must be understood by evaluators.

Everything Important in Business and Industry Is Evaluated

Richard A. Swanson

The mission and goal of business and industry are to maximize the economic return on investment through the production and sale of goods and services. The milieu in which this activity takes place is complex and fluid. The "business" of the private sector is no easy matter. The vulnerability of individual employees, departments, and the organization itself goes beyond the day-to-day experience of most people who work in and with the public sector.

It is in the private sector context of competitiveness and change that business decision makers must operate. In contrast, most program evaluation experts have a public sector orientation.

Recently, in my home state of Minnesota, Pillsbury Company was purchased by a British firm, and Control Data Corporation laid off thirty-five hundred workers in St. Paul. Northwest Airlines was threatened by a hostile takeover by a rich industrialist from out West. Concurrently, the Twin Cities of Minneapolis and St. Paul report a very healthy economy and a low unemployment rate. During the same time period, the University of Minnesota has not had a single takeover threat, nor has any other Minnesota public sector organization experienced one, though the donation-supported and nonprofit Minnesota Ballet recently went out of business. A year from now I am sure there will be similar reports about other Minnesota organizations, with the great bulk of the news being from the private sector.

Business decision makers—typically, people with titles of manager, director, vice-president, president, or CEO—are charged with making all kinds of decisions that contribute to the fundamental economic missions of their firms. They evaluate continually and make decisions based on their evaluations. Rarely do they evaluate and act in a manner comparable with the theories and practices of program evaluators, who have a public sector orientation. Evaluation experts usually focus on examining effects of programs (Phillips, 1983; Parker, 1986). Corporate decision makers focus on making up-front choices (Swanson and Gradous, 1988). One simple way of viewing these differences is to think of the decision maker as a venture capitalist who makes big business decisions on selected information. In contrast, the professional evaluator is viewed as an accountant who tediously adds up the pennies already spent. The bold venture capitalist relies on quick timing and choosing the best option, while the cautious accountant waits for all the data before filing an accurate report.

The discrepancy between the needs of the decision makers in business and the solutions espoused by many evaluation theorists is so great that I regularly ask the provoking question, "Will program evaluation scholars like this?" If the answer is no, I then consider that I might be on the right track.

The Nature of the Private Sector

A number of conceptual models describe the business context in which private sector training operates. The Tichy, Frombrun, and Devanna (1982) model is comfortable for both business people and scholars. The elements of the firm, according to this model, include mission and strategy, organizational structure, and human resources management. The societal forces include political, economic, and cultural factors.

For an analogy, we can use the conceptual model of the firm as the subject matter and the evaluator as a photographer. The photographer chooses among cameras; some have lenses that can zoom in or out. This lens movement, plus other intricacies of a camera and its operation, metaphorically represent the evaluator's expertise and toolbox. To the typical evaluation expert, the end produced—the picture—is the evaluation report. To the industrialist, the evaluation report is only *one* means to some other end within the business milieu of the firm. Many other things are going on in the firm, typically more than can be reasonably comprehended. Thus, the private sector decision maker agonizes about the options, their potential contribution to the business mission and strategy, and the relative cost and benefits of each option.

In my personal life I most often choose the simplest solution that will yield me the quality standard I desire. To return to the camera metaphor, my personal camera is a $79.95 model. The relative costs (financial and operational) and benefits (picture quality) of my daughter's $300 camera do not even interest me. I could take up two pages explaining why the $79.95 camera is perfect for me. However, most photography experts tend to snub my $79.95 solution. When they criticize, I simply cut those camera experts out of my photography decision-making process. Similarly, program evaluation experts are regularly cut out of the private sector training activity. Occasionally, at the training department's equivalent of the photographer's "weddings and proms," the experts are invited in to provide evaluation services. For example, the new human resources director, who manages all the human resources functions and who has no expertise in training, may hire an outside consultant to evaluate the training department. Another example would be the training manager who hires an external evaluator to assess the effectiveness of a companywide, participative management training effort.

It is important to note, so as to round out the scenario, that evaluation experts are also critical of the typical training-evaluation practices in the private sector and what they generally see as training-evaluation practices that contain major threats to validity (Campbell, 1971; Parker, 1986).

Efficiency and Effectiveness

The general business decision framework embraces the values of effectiveness and efficiency. Most public sector decision makers use the rhetoric of effectiveness and are constrained by controlled costs. Managers in the public sector are generally more verbal than their private sector counterparts. The public sector managers "talk" their way into success, and private sector managers "perform" their way into success. Thus, the public sector rhetoric often gets way out of line with the available resources. Since public sector rhetoric and accountability are with different constituencies, the loop is rarely closed as it is in the private sector.

In an elementary way, efficiency can be thought of as the cost side of the formula, and effectiveness the benefit side. In the private sector, however, return-on-investment (ROI) reigns supreme. Within firms, some business units are directly connected to benefits (or income generation), and others are considered overhead costs (or burden). For the training department positioned as overhead, cost control is paramount. A good training manager in this context reduces the training budget. When training is positioned as a business partner, that is, as a person expected to directly increase profits, performance improvement related to the goods and services provided by the firm is critical. A good training manager in this context increases units of work performance that have value to the firm. A very obvious example is with a firm that sells training as a product and service. A U.S. producer of portable data collectors used for statistical process control of manufactured goods also sells data collector training and statistical process control training to its hardware customers. The training manager reports to the national sales director and is evaluated on his or her dollar sales of training. Additionally, the training manager has financial incentives in the form of a commission beyond the base salary.

Most firms are not in the business of training employees or customers except when doing so contributes directly to the total performance of the organization. It is costly to train people. If possible, training, as with any other high-cost activity that is not making an important performance contribution, will be eliminated from the corporate budget. Decision makers generally decide to support training as a business decision with the purpose of improving performance, maintaining performance, or fulfilling compliance requirements.

In some instances training is forced on an organization by law or by regulatory agencies. For example, many chemical, manufacturing, and service industries are required by law to train employees in handling chemicals in order to protect their workers and the general public. Likewise, a small custodial firm can be held legally accountable for informing its employees about and protecting them from the cleaning agents they use in their work. The controversy surrounding the asbestos industry has been well publicized and has gained great public attention. Lives have been lost as a result of exposure to asbestos and asbestos-producing firms have been economically crippled or put out of business as a result of litigation.

Compliance training is a serious matter, and the role of evaluation is to document that the training did, in fact, take place. Even so, documentation such as content outlines, samples of handout materials, and attendance records will likely exceed the evaluation required for compliance training. Such crude evaluations as attendance at safety training, when viewed through the photographer metaphor, are analogous to a child's use of a cheap plastic camera containing film that develops before her eyes—instant documentation. The photographs may be fuzzy and poorly framed, but they are good enough for the situation.

Foundations of Training

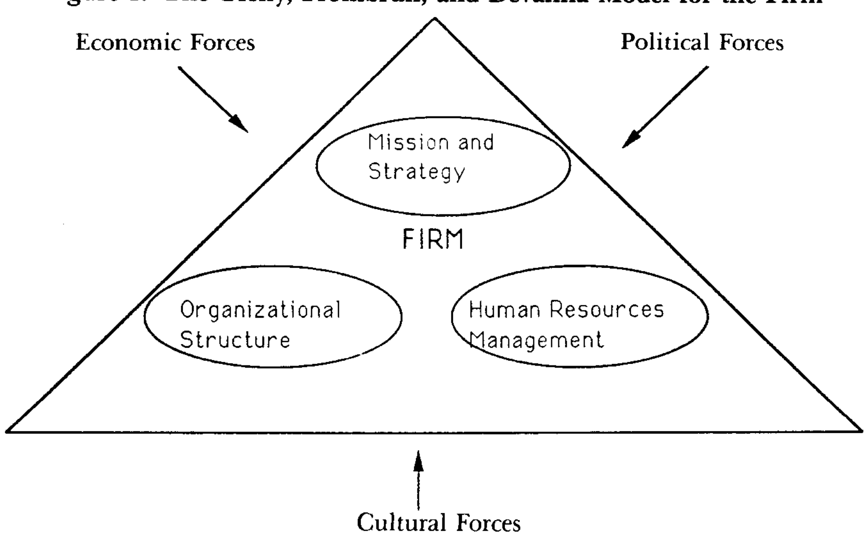
A number of years ago I presented the notion that there are two foundational bodies of knowledge for training: psychology and economics (Swanson, 1982, 1987). In a more recent discussion of the role of training and organizational performance, Campbell (1988) acknowledges this perspective. The psychological (educational) foundation of training is primarily focused on the development and implementation of training. The economic (managerial) foundation focuses on the organizational needs assessment and the ultimate contribution of training to organizational performance.

When performed correctly, systematic training in industry and business does not start with the assumption that there is a need for training. Many scholars of education, as well as those who articulate the dominant public sector view, assume that education or training is needed. In contrast, private sector training begins by questioning the need for improved organization or individual performance, then further questions the probability that reality training will influence that performance. Training systems, such as the Training Technology System (see Figure 1), carefully connect the training function to performance at both ends of the system (Swanson, 1987).

The learning, human development perspective is the view held by the majority of the practitioners in the training profession. Concurrently, the economic performance, or human capital view, is the perspective held by the majority of the private sector decision makers, who most likely were not trained to be trainers.

Private sector training-evaluation efforts are framed by the two foundational areas of economics and psychology and by the quest for effi-

Figure 1. The Tichy, Frombrun, and Devanna Model for the Firm



Source: Tichy, Frombrun, and Devanna, 1982. Reprinted by permission of *Sloan Management Review*.

ciency and effectiveness. These four elements provide a useful matrix for examining training evaluation (see Table 1).

Most program evaluation experts focus on the psychological row of the matrix in terms of behaviors or processes of changing behaviors. This psychological focus, by itself, can be fundamentally out of line with the private sector economic agenda.

The psychology-efficiency cell focuses on speeding up the learning process or on utilizing fewer resources in a set time period through the application of sound learning theory and educational technology. Another way of increasing efficiency is to reduce the inefficiencies of and barriers to learning that typically exist in unstructured training, such as self-managed, trial-and-error-learning.

Evaluation at the efficiency level is process-oriented and formative in nature. Such evaluations are used to improve the training/learning process. The substance of process control and improvement evaluation activity is important for professional trainers but is of little interest to nontrainers and others whose perspective primarily represents the economic/business concerns of organizations.

The economic-efficiency cell focuses on reducing or containing costs. Almost all businesses have fairly elaborate cost-accounting systems and methods. Furthermore, most work groups are financially monitored by someone in their respective firms. Categories of costs include fixed, variable, direct, charge-back/overhead and marginal/step costs (Head, 1985; Swanson and Gradous, 1988). Training departments and other departments seen as overhead are closely monitored through management information systems for the purpose of controlling costs or spotting cost-cutting opportunities. Even while this monitoring is going on, it is not common for this cost information to be fully shared with the training department or the personnel being evaluated. Furthermore, it is very possible for management to establish a training cost-reduction or cost-containment goal without directly communicating this to the training manager. At the present time there are many corporate takeovers in process in American business. Many of these firms, in an attempt to retain

Table 1. Training-Evaluation Framework

	Foundations of Training	
Productivity	*Economics*	*Psychology*
Efficiency	Reduce or maintain dollar/ performance cost	Reduce or maintain trainee anxiety
Effectiveness	Maintain or increase dollar/performance benefit	Maintain or increase trainee expertise

their existing ownership status, will systematically cut staff and functions for the purpose of lowering costs and increasing profits. Units not directly connected to the economic-efficiency cell are candidates for such cuts. Human resource departments in these firms that are grounded in the "psychology only" perspective are invariably cut.

The competent training manager, working in a cost-reduction or cost-containment environment, can increase training quantity and quality by entertaining new alternatives. Evaluation should help plan and verify these efforts. Creative managers can look at high-cost items such as especially costly programs or costly phases of programs and begin brainstorming options, evaluating these options to see if they deliver comparable results. Since training-development and delivery costs can be very high, the use of an "off-the-shelf" program may save on development costs. Self-instruction also may save on delivery costs. The development of new partnerships with the stakeholders in the training context, thus sharing responsibility for training, may also reduce costs. The point is, given the many training options available, there are possibilities for providing the same performance results at reduced costs. This kind of thinking is private sector thinking and the kind that evaluators should help trainers to pursue.

For example, the service training department of a manufacturing organization faced such a cost-containment condition. The department had been providing "free training" to independent distributors. In response to their cost-containment goal, they produced programmed instruction and trained their distributors to manage the training. They realized an $80,000 cost reduction, which they reinvested in other opportunities.

Learning and Satisfaction

The psychology-effectiveness cell in Table 1 is familiar to most evaluation experts (Brinkerhoff, 1987), the associated techniques being well developed and widely used. Here the focus is on trainee satisfaction and learning. The traditional, private sector training-evaluation practice of measuring participant satisfaction and the public sector practice of measuring participant learning are well understood by both professional trainers and evaluation experts. Trainers are often seen by evaluation experts as giving too much credence to measures of trainee satisfaction, while trainers generally believe that evaluation experts overemphasize formal measures of learning (Sleezer, 1989). As an additional difference, I have also observed that most private sector trainers live in a culture of "customer satisfaction," whereas most public sector educational evaluators live in a culture of "gains in knowledge."

Trainers generally focus learning measures on the very specific work behaviors that they are expected to develop in employees. They thus provide in-training exercises to satisfy trainees and others that learning has taken place. Some examples of specific work behaviors are the following: (1) Managers need to know the purpose of the XYZ Corporation employee-appraisal system and the method of completing the forms. (2) Aluminum extruder operators need to know how to start up, operate, troubleshoot, and shut down the "ACME Extruder."

To ensure effective work behaviors in these and other specific domains, trainers emphasize up-front analysis of work behavior to make sure the content is right (Swanson and Gradous, 1986; Carlisle, 1986). They then construct tests to check whether this content has been learned. In-training performance and performance tests (to a lesser extent) are valued over after-the-fact tests of knowledge.

Attempts to simplify the measures of satisfaction and to expand the measures of satisfaction beyond the trainees to the trainee's supervisors are frequent among private sector trainers (Swanson and Sleezer, 1987). For example, lengthy satisfaction questionnaires, often seen in public sector education programs, are reduced to the core purpose of training and core values of the organization. Core questions for participants typically include the following: Was the training delivered professionally? Were the learning objectives met? Was the original need met? Was the training valuable? Core questions for the participant's supervisor would *only* include the last two items. This is because supervisors did not directly experience the training.

Clearly, there are multiple "customers" of training in the business context and they should be taken seriously by trainers. Supervisors that allow their employees to go to training pay a price. That price is sometimes a direct budget transfer and almost always includes time away from regular work (which still needs to be completed). To ignore this decision maker in the training process would be very shortsighted.

Economic Effects

The economic-effectiveness cell in Table 1 is the bugaboo of the training profession and has not been well developed by evaluators. The evaluation options in this cell range from the accountant's perspective (Flamholtz, 1985) to the venture capitalist's perspective (Swanson and Gradous, 1988). Each financial perspective provides a powerful view of the position of training in the organization. To a top manager, not being able to talk about training from a financial perspective is almost worse than having inaccurate numbers. The private sector culture is a financial numbers culture. If trainers cannot even attempt to talk about their corporate activities in terms of financial indices, they are almost automatically placed off to the side or "out of the ballpark." If they can talk financial numbers, right or wrong, they are at least "in the ballpark." Once there, they and others can refine the measures.

Top managers in business and industry view and value training through an economic lens. These nontraining decision makers will mentally fill in the financial picture on training with or without the actual financial data. The risk is that, in most instances, this off-the-cuff analysis is inaccurate and not supportive of training.

As the cost and demand for training have increased, the demand for financial data on training is coming from top management, not from training professionals. But there are some promising new trends. One important method that some training professionals are using to move into the "economic-effectiveness" cell is the use of a training-for-performance orientation. Through critical investments in up-front training needs analyses, trainers identify important performance opportunities and needs that training can solve (Rossett, 1987). Subsequent back-on-the-job increases in performance provide excellent proxies for economic effectiveness in business and industry. Once the training opportunities and needs are isolated and pursued, the evaluator obtains actual measures of performance in the workplace. So it was with a very large health maintenance organization. After struggling with how to measure the effectiveness of a company-wide organizational development effort to "be nice to the customer," they finally came down to the numbers of subscribers as the performance measure. That is, the "nice/not nice" impression eventually translated to customer subscriptions. In this instance, the human resources development program and the measure of effectiveness were at the heart of the organization.

The key to the economic-effectiveness perspective is to get trainers to focus on "performance needs" and to get corporate decision makers to "want" what they need. A "wants" analysis will surely yield very specific requests for training programs, and going around asking people what they want is easy and comfortable. But very often those wants have nothing to do with the performance needs or problems that organizations and individual employees face because careful performance analysis is not required by the "wants" assessment. For example, managers in a large manufacturing firm said that they wanted cross-training for all their production employees to help cover work during absences and vacations. At the very same time, an incredible 48 percent of their product was turning out as scrap. For any number of reasons, the employees did not even know their own jobs, let alone their neighbor's jobs. The need for operator training was great. The need for operator cross-training was minimal given the urgent quality control problem.

Most important aspects of businesses already have been evaluated. Examples include units produced, cost per unit, accident-free days, sales per salesperson or sales region, number of customers, scrap rates, customer satisfaction, dollar sales, and a variety of other quality indices. Since most important aspects of firms are evaluated, the training evaluator may only need to look at ongoing organizational or employee-performance measures before and after training to get at the appropriate economic effectiveness measures. Of course, evaluators still must work before and after training to link training results to these important aspects of business.

Summary

An understanding of the language of the private sector is critical to evaluators. The evaluation expert who plans to work in the private sector should refer back to the opening sentence of this chapter: "The mission and goal of business and industry are to maximize the economic return on investment through the production and sale of goods and services." Clearly, the values and vocabulary of business differ greatly from the values and vocabulary of traditional public sector evaluation.

One simple, but important, means to understanding the full and realistic potential of training evaluation is to study the values and the vocabulary of business and industry. I believe that such an effort will change the evaluation expert's view of evaluation and increase the expert's potential for improving training in industry and business. Two concrete personal examples include the business and industry concepts of auditing and process improvement.

I worked in Brian Murphy, a business person, on the concept of auditing training (Murphy and Swanson, 1988). This was a very direct effort at taking the business language and methods of financial auditing and using them to develop a process for auditing the training function in the private sector. We sampled each step of the training process to see whether there were departures from sound practices. Only where such departures were identified was further evaluation (a costly process) pursued. New priorities, not just new words, appeared. Furthermore, the information generated from this auditing process did not exceed the requirements of the decisions to be made.

A second example is when I worked with Catherine Sleezer in the area of training-process improvement and control (Sleezer and Swanson, 1989). We were working with an electronics manufacturing firm that has a complex manufacturing system in need of a great deal of process control to keep it running (and to improve it). Conceptually, we identified a similar need for a training-process control system for the training department, and important new evaluation ideas emerged for us. In both of these examples, the values and language of the businesses involved greatly influenced the training-evaluation language and methods we proposed.

A second simple, but important, means of understanding the full and realistic potential of training evaluation is to study the existing measures of performance in any one business or industry. The title of this chapter contains the clue: "Everything important in business and industry is evaluated." While this statement is most likely an exaggeration, I have witnessed too many evaluation experts running around trying to invent measures that are compatible with their own values. Evaluation experts should cull the performance measures already used in and valued by firms. Training that is not connected to these measures should be questioned, and evaluation of training should incorporate these measures.

Evaluation of the effectiveness of an ongoing training program in terms of existing measures of organizational and individual performance is a powerful means of getting a firm to think critically about the purpose of training (Swanson and Sleezer, 1987). In the process, decision makers often ask, "Why did we approve this program?" At that point, the training and nontraining personnel are usually ready to think about training as a means to some large business goal, and evaluation as a way of helping to make wise decisions along the way.

References

Brinkerhoff, R. O. *Achieving Results from Training: How to Evaluate Human Resource Development to Strengthen Programs and Increase Impact.* San Francisco: Jossey-Bass, 1987.

Campbell, J. "Personnel, Training, and Development." *Annual Review of Psychology,* 1971, *22,* 565–595.

Campbell, J. "Training Design for Performance Improvement." In J. P. Campbell and R. J. Campbell (eds.), *Productivity in Organizations: New Perspectives from Industrial and Organizational Psychology.* San Francisco: Jossey-Bass, 1988.

Carlisle, K. *Analyzing Jobs and Tasks.* Englewood Cliffs, N.J.: Educational Technology, 1986.

Flamholtz, E. G. *Human Resource Accounting: Advances in Concepts, Methods, and Applications.* San Francisco: Jossey-Bass, 1985.

Head, G. *Training Cost Analysis.* Boulder, Colo.: Marlin Press, 1985.

Murphy, B. P., and Swanson, R. A. "Auditing Training and Development." *Journal of European Industrial Training,* 1988, *12* (2), 13–16.

Parker, B. L. "Summative Evaluation in Training and Development." *Journal of Industrial Teacher Education,* 1986, *23* (2), 29–55.

Phillips, J. J. *Handbook of Training Evaluation and Measurement Methods.* Houston: Gulf Publications, 1983.

Rossett, A. *Training Needs Assessment.* Englewood Cliffs, N.J.: Educational Technology, 1987.

Sleezer, C. M. (ed.). *Improving Human Resource Development Through Measurement.* Alexandria, Va.: American Society for Training and Development Press, 1989.

Sleezer, C. M., and Swanson, R. A. "Is Your Training Department Out of Control?" *Performance and Instruction,* 1989, *28* (5), 22–26.

Swanson, R. A. "Industrial Training." In W. H. Mitzel (ed.), *Encyclopedia of Educational Research.* (5th ed.) New York: Macmillan, 1982.

Swanson, R. A. "Training Technology System: A Method for Identifying and Solving Training Problems in Industry and Business." *Journal of Industrial Teacher Education,* 1987, *24* (4), 7–17.

Swanson, R. A., and Gradous, D. B. *Performance at Work: A Systematic Program for Analyzing Work Behavior.* New York: Wiley, 1986.
Swanson, R. A., and Gradous, D. B. *Forecasting Financial Benefits of Human Resource Development.* San Francisco: Jossey-Bass, 1988.
Swanson, R. A., and Sleezer, C. M. "Training Effectiveness Evaluation." *Journal of European Industrial Training,* 1987, *11* (4), 7-16.
Tichy, N. M., Frombrun, C. J., and Devanna, M. A. "Strategic Human Resource Management." *Sloan Management Review,* 1982, *23,* 47-61.

Richard A. Swanson is a professor and director of the Training and Development Research Center at the University of Minnesota, St. Paul.