

Training America: The Numbers Add Up

Previous estimates of the number of Americans trained by their employers each year have fallen far short of the mark, according to ASTD's newest studies on the subject.

By **ROBERT CALVERT, JR.**

Since publication of a 1977 Conference Board report, *Education by Employers*, most authorities have estimated the number of persons annually trained by employers at from 7 million to 10 million.¹ Now, a pair of studies recently conducted by ASTD suggest that employers train over 40 million people a year. This information couldn't have come at a better time.

For many years, education experts bemoaned the lack of information on employer-sponsored training. In 1978, the federal government recognized the problem and called for baseline data "on the contributions of private industry to post-secondary education and training. Development of an adequate classification of the types of education and training support by private industry must precede the collection of data."²

In response, ASTD published a nationwide analysis of employer-based training in 1983, based on a sample of 50,000 American households. Written by ASTD chief economist Anthony Carnevale and labor economist Harold Goldstein, *Employee Training: Its Changing Role and An Analysis of New Data* reported that employers were spending an estimated \$30 billion every year on formal courses of instruction and training, and an additional \$180 billion on informal on-the-job coaching and supervision.³ According to this study, one in eight American employees receives training in formal courses each year. However, significant variation was reported among age groups,

population groups, subject matter, occupations and industries. This study also reported that banks and other financial institutions are unusually training intense.

Even though the training reported in this ASTD study was significant, the survey questions were not designed specifically for employer-provided training. Bob Craig (then ASTD vice president for government affairs) proposed a project that later received some funding from the National Institute of Education (research arm of the U.S. Department of Education) to develop a system for measuring employer-sponsored training in the United States. This author retired from the National Center for Education Statistics and joined ASTD as a consultant to direct this project. The results, and we are biased, were encouraging.

The early steps in the project need only passing mention: development of an advisory committee, a search to identify recent research in this area, determining

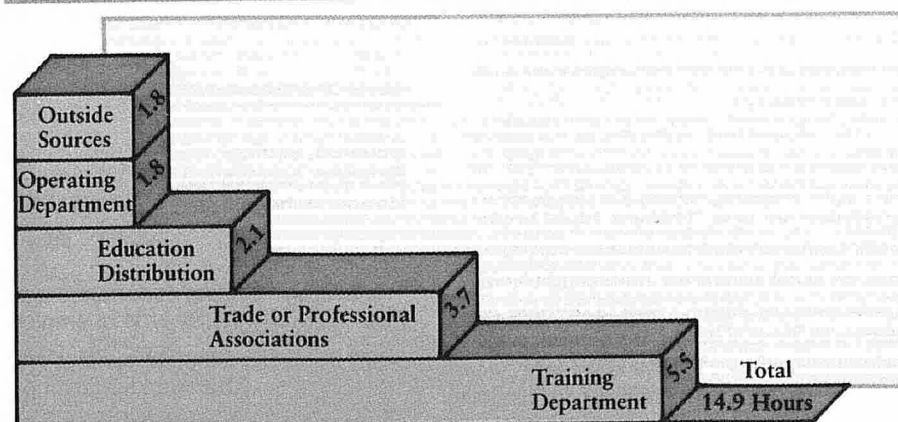
which items were most important to include in a survey and field testing those items through visits to employer offices to see if the desired data was actually available.

By early 1984, the survey of 200 employers was launched. Care was taken to select those employers from the wide range of categories in the Standard Industrial Classification code and to make it convenient to complete by limiting the actual survey form to a single page. Although of modest length, the form included the key questions: How many people do you train each year? How many person hours of training occur? What subjects are studied? How much money is spent?

The initial response was discouraging; few replied by the one-month deadline. But intensive follow-up activities, particularly over the phone, resulted in the replies of 86 employers (43 percent) by survey close.

The initial survey taught us how best to

Average Training Hours Per Employee by Source



Source: Table 12

Robert Calvert, Jr., a consultant to ASTD, was deputy administrator at the National Center for Education Statistics, United States Department of Education.

approach employers and how to stimulate responses. For this reason, we sought a six-month extension for the project—with no increase in funding—from the National Institute of Education to make an additional study. Once given the extension, we approached the American Bankers Association (ABA) with the suggestion that we jointly sponsor a study of training in the banking industry. The ABA was thoroughly cooperative and invested money in the project, and the study moved quickly from preliminary discussions in August 1984 to survey closeout and completed tables in March 1985. Over 400 banks provided the data used to develop the national estimates cited in this article.

When the project began, its sole objective was to develop a questionnaire and survey methodology which could later be used in a major study of employers in the United States. The initial ASTD survey was intended to provide experiences and insights into the best approaches. However, when the returns were analyzed, we found we had information from 86 employing organizations whose total employment was almost one million. Although not representative of all employers in the United States, the study does report on a large portion of our work force and is the most recent major study in this area. The bank survey provides national estimates that become more interesting when compared with data from the initial ASTD study.

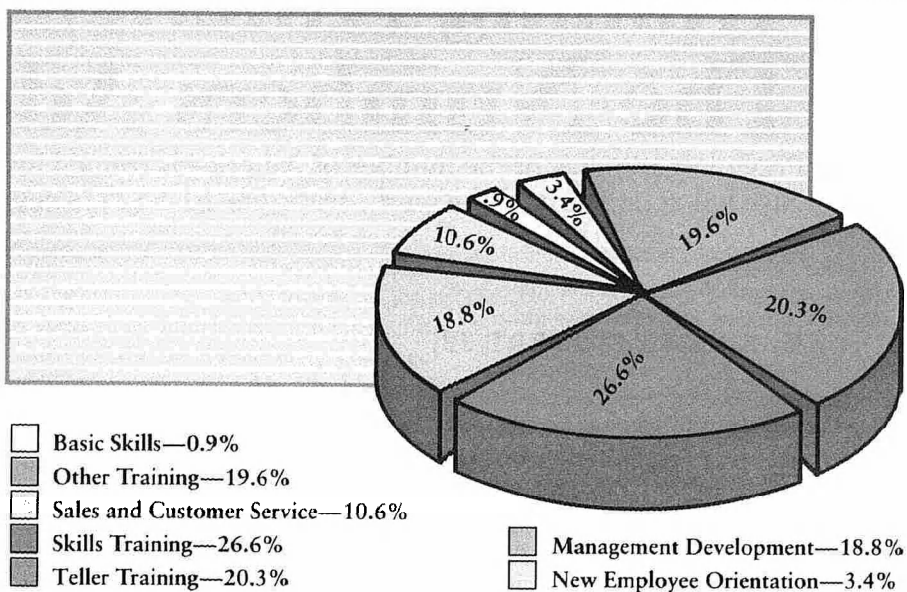
What did the surveys report about the amount of training by employers? Much more than we had anticipated. As shown in Table 1, the initial survey reported an average of 1.02 training activities per year for each employee. This was so much higher than the 1977 Conference Board estimate that we waited anxiously to see what the bank survey reported. The latter showed an average of 1.8 training activities per year for exempt employees and 1.05 for nonexempt employees—additional support for a higher estimate of training in this country.

The bank study reported in a slightly different fashion—the total number of hours of training taken by the average employee per year. This was 14.88 hours, with a range of 20.88 for exempt employees to 11.84 hours for nonexempt staff. Details on the subject/area of training are shown in Table 2 based upon information provided in the initial study.

The major areas of training for banks reported are:

- job skills training (46.9 percent);
- management skills (18.8 percent);

Percent of Training by Subject



- marketing and sales, including customer relations (10.6 percent);
- human relations (5.5 percent);
- new employee orientation (3.4 percent);
- basic education (0.9 percent);
- occupational health and safety (0.8 percent).

The least reliable data dealt with training costs. Around one quarter of the respondents on the initial survey said this was "confidential" information and left the item blank. Those who did respond often failed to provide complete details. The best that may be extracted from this data is the

average cost per hour of training—\$18.44 in the initial survey. By level of employee, these were the averages: salaried exempt, \$30.39; salaried nonexempt, \$17.89; hourly nonexempt \$10.37.

One bank survey question sought information on source of training. The responses reflected the relatively high amount of training in that field through professional associations: training department, 36.8 percent; operating department, 11.7 percent; outside vendor, 4.1 percent; educational institution, 14.1 percent; trade or professional association, 25.1 percent.

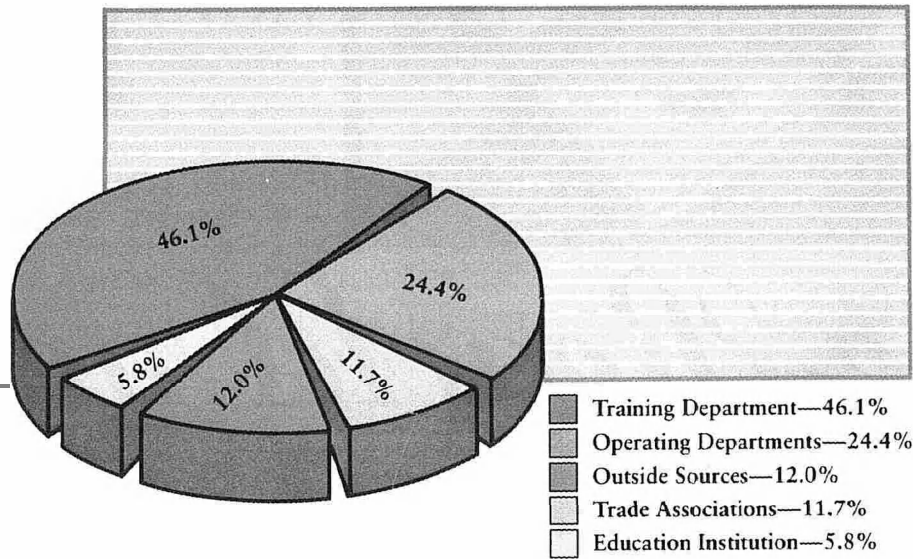
Table 1—Average Number of Training Occurrences Per Employee Per Year by Level of Employment, 1984 and 1985

Level of employment	Initial ASTD Study	Bank Study
Salaried, exempt	1.09	1.8
Salaried, nonexempt	0.92	
Hourly, nonexempt	1.16	1.05
Average, all employees	1.02	1.30

The average training occurrence lasts just under 10 hours according to the initial ASTD survey. By type of employee these were the averages:

Salaried exempt employees	16.8 hours
Salaried nonexempt	10.6
Hourly nonexempt	6.08
Average for all employees	9.29 hours

Percent of Training by Source



Caution must be used when interpreting the data. First, the training reported by the survey respondents is likely less than the total actually taken by their employees during the year. Operating departments often conduct training or send people to outside sources without notifying the training department. Not all in-house training on new equipment and changes in procedures may be reported as educational activities. Finally, the responses given to the initial ASTD survey may not reflect

the average for all types of organizations—due to sample size and selection. (For example, construction firms, hotels and motels, and small retail stores generally do little training—they either hire only experienced persons or do little formal training after hiring.)

But the results beg for some analysis, particularly to help answer the major question about how much training is being done by employers today. We can only speculate in this area, but the data provide

a basis for some general assumptions.

Both the initial ASTD study and the bank survey report that employers average more than one training occurrence per employee each year. Given that our labor force is 110 million, one might assume—much too quickly—that over 110 million persons are trained by their employers each year. But many of these people are employed in firms, on specialized union jobs, or by small organizations where no training exists. Consequently, the 110 million figure more appropriately might be reduced to 60 million who work for the types of organizations where training is generally found.

Even this figure must be adjusted downward. We know, for example, from the *Participation in Adult Education* study, that the average adult who participates in education takes 1.4 activities per year.⁴ Since 60 million people work in organizations offering training—and 18 million did not participate in training—we can conclude that 42 million took one or more activities.

The 42 million figure is not an entirely defensible estimate, but the data from these two studies suggest the *level* of training in this country today. It remains for future research to support or revise the figure. In any event, unless these two studies are terribly out of line, considerably more employer training goes on today than previously assumed—possibly four or five times as much.

The data do point to the clear need for a definitive study of training by employer organizations—a study for which ASTD already has developed a plan and is seeking funding for such a major effort.

Table 2—Subject/Area of Training by Size of Organization

Subject	Large	Medium	Small
New employee orientation	9%	8%	16%
Job skills training, employment orientation	46	51	34
Management skills, supervisory techniques	21	15	16
Marketing, sales, etc.	4	4	13
Human relations, communications skills, etc.	12	8	11
Occupational health and safety	4	9	8
Basic education, literacy	3	1	1
Other	1	4	1
Total	100%	100%	100%

Note: Responding organizations fit into the following categories: large—10,000 or more employees, medium—2,000 to 3,999 and small—1 to 999.

References

1. Lusteran, S. (1977). *Education in industry*. New York: The Conference Board.
2. A framework for planning U.S. federal statistics for the 1980s. (1978). *Statistical Reporter*, p. 5.
3. Carnevale, A.P., & Goldstein, H. (1983). *Employee training: Its changing role and an analysis of new data*. Washington, DC: ASTD Press.
4. U.S. Department of Education, National Center for Education Statistics. (1982). *Participation in adult education 1981*. Washington, DC: U.S. Government Printing Office.

The project presented or reported herein was performed under a Grant from the National Institute of Education, Department of Education, however, the opinions expressed herein do not necessarily reflect the position or policy of the National Institute of Education and no official endorsement by the National Institute should be inferred.