

DOCUMENT RESUME

ED 378 407

CE 068 086

AUTHOR Bergman, Terri  
 TITLE Company Training. A Key Strategy for Success. Workforce Brief #2.  
 INSTITUTION National Alliance of Business, Inc., Washington, D.C.  
 SPONS AGENCY Department of Labor, Washington, D.C.  
 PUB DATE Jan 95  
 NOTE 5p.; Produced by the National Workforce Assistance Collaborative.  
 PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS Adult Education; Basic Skills; \*Corporate Education; \*Job Training; \*Outcomes of Education; Postsecondary Education; Productivity; Small Businesses; Technical Education; \*Training Methods; \*Training Objectives  
 IDENTIFIERS Workplace Literacy

ABSTRACT

General research and anecdotal reports have confirmed that both technical and basic skills training offer many benefits to companies of all sizes. Company training can improve employee performance, firm productivity, product quality, and company profitability. Training supports "high-performance" work practices such as the following: total quality management, self-managed work teams, flexible production lines, elimination of quality inspectors, statistical process control, and just-in-time inventory. According to research examining the experience of numerous U.S. companies, training improves employee performance by improving the following: reading, writing, math, communication, and problem-solving skills; motivation; willingness to take responsibility; ability to work independently; ability to work in teams; confidence; company loyalty; self-esteem; and job satisfaction. Combined training and restructuring efforts have been shown to increase firm profitability and thereby boost employee compensation and keep workers employed. Before launching training programs, businesses should take the following steps: assess their current situation; determine whether more comprehensive changes, such as work restructuring, are needed; and ascertain how training would fit in within larger organizational restructuring efforts. Assistance in developing/delivering training can be obtained from many sources, including community colleges, manufacturing extension centers, business/trade associations, unions, and consulting firms. (MN)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*

# WORKFORCE

## BRIEF #2

PREPARED BY THE NATIONAL ALLIANCE OF BUSINESS

# Company Training

## *A Key Strategy for Success*

### Training Works!

As companies seek to survive, and even flourish, in today's increasingly competitive global economy, many are finding that investments in training can improve:

- Employee performance.
- Firm productivity,
- Product quality, and
- Company profitability.

In addition, training is key to companies adopting such high performance work practices as total quality management, self-managed work teams, and flexible production.

As part of its effort to increase small and mid-sized companies' awareness of approaches to improving competitiveness, the National Workforce Assistance Collaborative compiled the following information on the benefits of training that many businesses have experienced.

### Training Supports "High Performance Work Practices"

- Total quality management
- Self-managed work teams
- Flexible production lines
- Elimination of quality inspectors
- Statistical process control
- Just-in-time inventory

A study to be published in *Industrial Relations* found that manufacturing firms with formal training programs experienced a 19 percent greater rise in productivity (over three years) when compared to companies without such programs. Another study to be published in *Industrial and Labor Relations*

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)  
\* This document has been reproduced as received from the person or organization originating it.  
 Minor changes have been made to improve reproduction quality.  
\* Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

### Returns on Training

- Motorola Inc. reported gains of \$30 in productivity over a 3-year period for every \$1 spent on training.
- Otto Engineering Inc. claims a 340 percent increase in productivity since its training program began in 1988.
- An *Industrial Relations* study calculated a 19 percent greater rise in productivity over three years for firms providing training.
- Upjohn Institute found an 11 to 17 percent increase in productivity for companies participating in literacy programs.
- Industrial and Labor Relations Review* reported a 7 percent reduction in scrap for companies that doubled employees' training.

*Review* found that increased formal training significantly reduced the rates at which products had to be scrapped; companies that doubled their training

per employee (from an initial average of 15 hours) saw a 7 percent reduction in scrap.

In a March 1993 issue of *Fortune*, Motorola Inc. claimed that every \$1 it spends on training delivers \$30 in productivity gains within three years. Last year, Motorola

spent \$120 million on education, 3.6 percent of payroll. Since 1987, the company has cut costs by \$3.3 billion -- not by firing workers, but by training them to simplify processes and reduce waste. Sales per employee have doubled in the past 5 years, and profits have increased 47 percent.

Training in basic skills shows productivity pay-offs as well. A study published by the Upjohn Institute in 1993

estimated that the annual out-of-pocket cost of workplace literacy programs was only about \$1,000 per employee, while many programs resulted in increases of 11 to 17 percent in employees' earnings, and by implication, productivity.

Otto Engineering Inc., an Illinois-based manufacturer of elec-

trical switches, launched a math and English program in 1988. While classes for its 120 workers have cost Otto \$100,000 per year, productivity has increased 340 percent since the program began.

### Employee Performance

Improvements in employee skills, as well as in such attitudes as self-confidence, self-esteem, job satisfaction, and morale, lead to improvements in firm performance.

A study by the Southport Institute for Policy Analysis found

that investments by small firms in workplace education programs resulted in basic skill gains (reading, writing, mathematics, and other academic skills), attitudinal and behavioral improvements (motivation, self-esteem, willingness to take responsibility, teamwork, and communication and problem-solving

abilities), and bottom line benefits (improvements in product quality and greater firm productivity).

Phoenix Specialty Manufacturing Company, a firm in rural South Carolina with a workforce of fewer than 150 people, instituted a basic and job-related skills training program in 1990. Workers gained increased confidence and satisfaction from meeting their educational goals; they were more willing to take responsibility for decisions, to provide informed feedback, and to be

active in handling preventive maintenance. According to one supervisor, these changes led to a decline in customer rejections to 7 items in 2,000, a rise in the on-time delivery rate to the "mid 90s," and a decline in material usage by 3 to 4 percent. In addition, bad orders were caught before they got out the door.

Weber Metals, a manufacturer in Los Angeles, provided a variety of training classes, including English as a second language, math, spelling, computer literacy,

and GED (General Educational Development) preparation.

Workers felt better about themselves, enjoyed the camaraderie of working in teams, and were more self-assured. Because of employees' improved speaking, listening, reading, and math skills, the company experienced improved commu-

nications, improved production reports, a reduction in errors, a reduction in scrap from 20 to 2 percent, and a safer work site.

Wm. Dudek Manufacturing Company, a small Chicago business, provided English as a second language and math skill classes to its 30 employees. Employees gained increased self-confidence and job satisfaction, while the company gained better communication among employees, employees able to work independently and as part

of a team, increased worker loyalty, and improvements in sales volume, profit, work flow, and on-time deliveries.

The United Auto Workers-Ford Education, Development and Training Program raised employee job satisfaction ratings to 75 percent. This program, a joint effort in education, training, and worker empowerment, has also contributed to increasing productivity at Ford by 36 percent since 1980, a factor that led to Ford's stock value rebounding dramatically over the past decade. In addition, for the first time in years, a U.S. auto maker was able to reclaim the title to the best selling car in America with the 1992 Ford Taurus.

### Firm Productivity

Training efforts can boost firm productivity by:

- Increasing efficiency,
- Reducing costs, and
- Cutting waste.

Superior Technical Ceramics Corp., a small manufacturer in Vermont, developed and delivered a basic skills and technical training program that dramatically decreased the time engineers spent setting up work stations and supervising workers, and improved production efficiency.

Delta Wire, a small, family-owned manufacturing company in Mississippi, instituted a functional context basic skills program that enabled workers to record and interpret information on a control chart, and communicate about that information properly. A year after the program was introduced, Delta Wire's non-conforming material decreased from 6 or 7 percent to 2 percent, and its productivity increased from 70,000 to 90,000

### Training Improves Employee Performance

- Reading, writing, and math skills
- Communication skills
- Problem-solving ability
- Motivation
- Willingness to take responsibility
- Ability to work independently
- Ability to work in teams
- Confidence
- Company loyalty
- Self-esteem
- Job satisfaction

pounds per week. In 1990, the company was awarded "best in class" from Goodyear, its largest customer.

Rockford Process Control Inc., a custom metal-assemblies maker in Illinois, credits training with helping it improve productivity and expand its business. In the late 1980s,

Rockford Process Control began sending its 60 employees to Rock Valley Community College. The employees studied just-in-time production, problem-solving, and other techniques that helped Rockford cut defects, increase production, and, according to founder Paul Colloton, land Honda Motor Co. as a major client. Rockford's workforce has increased to 125, and, by year end, its revenues are expected to double from its 1990 level to \$12.5 million.

### Product Quality

Companies seeking to retain existing clients and attract new ones are using training to improve product quality and increase customer satisfaction. The United Auto Workers-Ford Education, Development and Training Program mentioned earlier reduced production costs, cut absenteeism, and boosted product quality by 52 percent.

New York's Corning Inc. and the American Flint Glass Workers Union jointly operate a total quality management program that includes continuous on-the-job

### Training Contributes to Increased Productivity

- Increased production
- Improved sales volume
- Increased profit
- Improved work flow
- Decreased time spent supervising
- Decreased customer rejections
- Decreased defects
- Decreased waste
- Decreased scrap
- Increased on-time deliveries

training and a multi-skilled, team-based system of production. In this program – which enables the production line to be rapidly altered to produce different products – 25 percent of an employee's first year is devoted to training in the range of skills required on the

job. The program is credited with helping the company turn a projected \$2.3 million loss into a \$2 million profit.

Gilroy Foods Inc., a small food product company in California, introduced a large-scale technical training program linked to an employee career ladder. Company benefits included improved product and service quality, as well as increased equipment utilization, increased productivity and value added per worker, and reduced recruitment costs.

### Company Profitability

A number of companies have found that training can play a large part in helping them to avoid downsizing and stay in business.

Shelby Die Casting Company, in Mississippi, was considering closing

its 100-employee facility. The company introduced a skills enhancement program that enabled it to adopt self-managed work teams and total quality management, keep its operation in business, and produce its first profits in six years.

At the end of 1985, Motorola Inc. had decided to move all production of cellular phones to the Far East. The general manager in Illinois convinced the corporation to grant him 1 1/2 years to increase cellular phone productivity and quality. He redesigned the phone, adopted new production techniques, and altered human resource practices. To support these changes, he instituted pro-

grams to upgrade the skills of the hourly workforce. Together, all of these changes – including training – turned the company around and were impressive enough to keep the plant open.

United Electric Controls, a small manufacturer located outside Boston, provided structured and informal

training on just-in-time inventory, single minute exchange of dies, and mistake proofing the means of production. Because of improved production methods and internal education and training, the company has not had any significant layoffs in the past three years.

### Training Improves Product Quality and Company Profitability

- Corning Inc. increased product quality by 52%.
- Gilroy Foods Inc. improved product and service quality.
- Shelby Die Casting Co. saw its first profits in six years.
- A Motorola cellular phone plant was able to stay open.



## Benefits to Employees

Company (and joint company-union) training programs benefit both companies and employees simultaneously. Training efforts that increase firm profitability can boost employee compensation, and, by ensuring firm viability, keep workers employed.

Training offered by Corning Inc. and the American Flint Glass Workers Union enabled the company to pay good wages to its employees.

Training programs at Gilroy Foods Inc., Wm. Dudek Manufacturing Company, and Shelby Die Casting Company improved employees' advancement opportunities.

Employees who successfully completed the training offered by Superior Technical Ceramics Corp. received promotions that greatly increased their earnings.

The United Auto Workers-Ford Education, Development and Training Program enabled workers to share in productivity increases through a profit sharing plan.

A basic skills training program at Delta Wire led to productivity improvements for the firm and a \$1.50 per hour increase in bonus pay for employees.

The combination of restructuring and training at Motorola Inc. and United Electric Controls kept the plants open and the workers employed.

Training contributed to an increase in the size of the workforce at Rockford Process Control Inc.

## Steps to Start Training

The value of training is supported by both general research and anecdotal reports. Returns on investment exist for both technical and basic skills training, for large companies and small ones, and across a wide range of industries. Even more value can be gained when training is linked to the adoption of high performance work practices.

Before launching a training program, you should:

- ✓ Assess your current situation.
- ✓ Determine whether you need to make more comprehensive changes – such as work restructuring, and
- ✓ Ascertain how training would fit within this larger effort.

Companies do not have to work alone. You can get help for both assessments and training from a variety of sources, including:

- ✓ Community colleges and other public and private education institutions,
- ✓ Manufacturing extension centers,
- ✓ Business and trade associations,
- ✓ Unions, and
- ✓ Consulting firms.

Before purchasing assistance, though, check references, and be sure that the service providers you select have been successful with companies like yours in the past.

*Terri Bergman  
January 1995*

The *National Workforce Assistance Collaborative* builds the capacity of the service providers working with small and mid-sized companies in order to help businesses adopt high-performance work practices, become more competitive, and ultimately advance the well-being of their employees. The Collaborative was created with a \$650,000 cooperative agreement grant from the *Department of Labor* to the *National Alliance of Business*. Current partners on the project include the Institute for the Study of Adult Literacy at Pennsylvania State University, the Maryland Center for Quality and Productivity, and the *National Labor-Management Association*. The Collaborative provides assistance in four areas: employee training, labor-management relations, work restructuring, and workplace literacy. For more information, contact Bernice Jones at the National Alliance of Business, (202) 289-2915.