

Workplace Literacy in Industrial Settings

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Abstract

This paper was presented at the International Literacy Year Colloquium in October 1990, in Washington, D.C. It addresses the problem of workplace illiteracy and marginal literacy. The need among blue-collar workers is particularly keen and is being neglected. Traditional adult literacy courses are, for the most part, not adequate. Curriculum needs to be pertinent to worker-perceived needs. Employers need to release workers with pay for at least part of the training time. The identities of those involved in classes may need to be kept confidential. Several examples of workplace literacy programs are given. There are some bright spots, but much work needs to be done.

1. Introduction

To set the stage for this presentation on literacy in the workplace, let me summarize the current situation of workplace literacy in the United States. Of adults who need literacy instruction, we are reaching only three million out of a projected fifty million. Public school programs run by the Federal Adult Education Act reach most of these three million, and volunteer programs, such as Laubach Literacy and Literacy Volunteers of America, reach another 160,000. More shocking than that low enrollment figure is the dropout rate among those who do enroll: 50 to 70 percent drop out, most within the first few weeks.

The workplace is where we can serve many of these people. This captive audience setting is where people can be reached: at day care centers, workplaces, and prisons. This may be the only way to reach the 92 percent untouched by present programs.*

2. Literacy Problems

At the high end of the scale of those in need are the marginally illiterate, those who cannot cope with changes brought about by technology. At the lower end of the scale are the functionally illiterate, those who operate at a low elementary school level. The number of marginally illiterates are increasing rapidly as technologies change and as we switch from a manufacturing-dominated to a service-dominated economy. On October 9, 1990, the Conference Board released a study called *Literacy and the Workforce*. It cites a study in which more than half of the 3,600 young adults surveyed fell into the category termed "mid-level literacy." These could perform basic tasks, but will likely have problems carrying out the more complex tasks demanded of the workforce ten years from now. Five percent of those tested performed below the fourth grade level. One percent did not qualify for testing at all.

The Hudson Institute produced the *Workforce 2000* report, the first study to bring national attention to what the U.S. will face by the year two thousand. It emphasizes the growing mismatch between job skill requirements and the available pool of workers. It finds that only 27 percent of new jobs ten years from now will fall into most skill categories, compared to 40 percent today. Americans will find themselves in school curricula designed for assembly-line factory jobs, but new jobs will be in the service industries. School is becoming less relevant.

Arnold Packer, one of the authors of *Workforce 2000*, in an article in the *Washington Post* in July 1988, tells about the necessity for redesigning curriculum in the public school system,

The factory floor has changed drastically. U.S. manufacturing industries now use statistical quality control. Even suppliers to the big firms must grasp principles of statistics. Yet the school curriculum keeps trigonometry, while the NAEP Study survey finds that only 34 percent of whites, 20 percent of Hispanics, and 8 percent of blacks can figure out the tip and change for a two item restaurant meal.

*Carolyn Ebel Chandler, Independent Media Consultants, is Manager of the Levi Strauss & Co. BELL (Basic Education Learning at Levi's) program, a program developing in LS&CO across the U.S. Chandler also directs a Scripps-Howard funded project (in partnership with the U.S. Chamber of Commerce/Center for Workforce Preparation and Quality Education and National Graphic Supply in Albany) to encourage workplace literacy partnerships between local Chambers of Commerce and the print-related industry.

Chandler has been a public school administrator for ESL child and adult education programs, acting Executive Director of the National Association for Bilingual Education, assistant professor at Georgetown University, and Director of the former BESL Center in New Holland, Pennsylvania. She directed the American Newspaper Publishers Association literacy program for four years. She has her Master's and Education Doctorate in teaching English to speakers of other languages from Temple University.

The Home Builder's Institute provides another example. It teaches workers to build "smart houses," in which a computer controls a house's temperature, appliances, and compact disc audio systems (Packer 1988). "Workers need to know digital technology," says Packer; unfortunately, "School science departments still have students cut up frogs."

The problem we face is not just youth arriving at the workplace without necessary basic skills. A recent study (Educational Needs of Dislocated Workers in Minnesota) looks at workers searching for new employment, to see if those who need to be retrained had enough reading and math skills to make the transition (Park 1988). The study found that most dislocated workers could not envision making a radical change in their occupations. When asked, "What job would you like to get?," most wanted something similar to the job they had just left. In today's rapidly changing society, this is, indeed, unrealistic.

The Minnesota study found that older workers displaced from jobs they performed for a lifetime resent training efforts. They resent having to change to service-related jobs that pay considerably less. Such a worker often does not realize he lacks the necessary skills until he actually loses his present job. One industry executive told me that it is not a matter of dumbness or smartness. He found that his workers once had the necessary skills in math, but they had not used them. Over the years, they had forgotten the skills because of the lack of use. Now the skills are necessary, and the workers must be retrained. We have millions of workers in this country in need of basic skills training.

3. Workplace Literacy

There are programs that actually train or teach employees. We hear much of what businesses are doing for literacy in this country. I spent four years running the national newspaper literacy campaign, but we did not have a workplace campaign. Instead, we promoted businesses to support community programs.¹ Few businesses actually do much training of their own employees.

Tony Sarmiento says that employers' training efforts seldom touch blue-collar workers.² Only 10 percent of all workers receive any kind of training on the job, and most of these are managers and technical elites. The Bureau of National Affairs found 60 percent of firms surveyed provided courses to managers, 50 percent to professional and technical workers, and 18 percent to nonexempt employees. These are programs that employers sponsor to teach their own employees in classes set up at the work site.

What I advocate are not classes that managers recommend their employees attend at a mainstream program in the community. I recommend classes in which the subject of the worker's reading lesson is what he normally does at work. Some programs, such as local volunteer or local community college programs, come and teach at the site, but they use generic curriculum. We need programs that utilize events at the workplace, programs that deal with workers' activities during the day and determine how this relates to reading, writing, and math skills needed for that job.

A few companies recognize the strength of a worker-centered or learner-centered approach. Tony Sarmiento refers to what is called "The Guiding Principles" of the United Steel Workers Bethlehem Career Development Center.

Workers must play a significant role in the design and development of their jobs, their training and education, and their working environment. Experience has shown that worker growth and development are stunted when programs are mandated from above, but flourish in an atmosphere of voluntary participation in self-designed and self-directed training in education.

At the United Auto Workers Ford Reading Academy at Eastern Michigan University, their guiding principles are:

1. Build on what adult learners already know.
2. Teachers and learners are equal partners in the learning process.

¹The best source of information on that type of awareness activity, and on what businesses are doing for the community, is the Business Council for Effective Literacy, the BCEL Newsletter.

²Assistant Director of the Human Resources Development Institute AFL/CIO, at a speech before a Workplace Indiana Conference in November 1989.

3. Make the learning environment relevant and authentic in the eyes of the learner.

4. Sample Workplace Programs

Workplace literacy programs, as well as other “captive audience programs,” are not new. They are just fewer and less well-known. The following are some examples.

Hampton Papers

Hampton Papers in Holyoke, Massachusetts, employs about 185 people. According to the BCEL Newsletter, twelve workers are currently enrolled in a company learning program on the premises, Monday to Friday, from noon to five P.M. The company releases them three hours a week, paying them their regular hourly wages.³ The study materials deal with tasks performed on the job.

Finger Lakes Regional Education Center for Economic Development, Rochester, New York

This is a consortium of education providers. The program has developed generic curriculum for basic skills needed in the workplace, as well as in areas of curriculum, such as statistical process control, decision-making, problem-solving, and basic computer literacy. It is shared by a number of Rochester area manufacturing suppliers.

Aetna Life and Casualty Company, Hartford, Connecticut.

They operate an educational program for new workers who lack necessary skills. Aetna targets the high-need jobs in the entry-level and administrative areas. Aetna provides social and resource skills training, and the local community college provides basic business skills instruction.

Dominos Pizza.

They sponsor the use of interactive videodiscs to improve reading and math skills while employees learn to make pizza dough.

Time-Warner

They developed the *Time to Read* program. For several years now, volunteers across the country are trained to use TIME MAGAZINE, SPORTS ILLUSTRATED, PEOPLE, and other publications as the core curriculum, and students receive free subscriptions. It's used both within the company, as well as at thirty-five community sites across the country.

Amalgamated Transit Union⁴

They developed a study guide and tapes to help members improve basic reading and test-taking skills. They also review driving skills, because they were faced with new regulations that required workers to take a driver's test again to keep their jobs. Those who could not read would not pass.

Steel Workers Union

They created self-interest classes for workers at Ohio Steel Two.

³When I was in the public school system in Pennsylvania, we set up a workplace literacy program under the adult education system. We worked with adults and children in twenty-nine districts, but also we set up programs in steel factories and poultry companies. The most successful programs were those in which companies released the worker with pay for half the time, with the worker donating the other half.

⁴The AFL/CIO Human Resources Development Institute has published a new book, *Worker-Centered Learning: A Union Guide to Workplace Literacy*. It describes several union-sponsored programs, and how a union can plan and operate a worker-centered literacy program. I think that unions are far ahead of most business efforts in starting workplace programs.

United Auto Workers Union

Developed with Chrysler, children of union members received special classes.

International Ladies Garment Workers Union, New York

They conduct some classes at the work site, but also give workers a choice of locations, so they will not be embarrassed.

Bay Front Medical Center, St. Petersburg, and Service Master Corporation

These joined forces to start a basic skills program for health resources technicians. The program also included housekeeping, laundry, and food-service personnel.

Other health care providers are getting started in workplace literacy. The Hospital and Nursing Association just had a national conference that spoke to literacy issues. The [pharmaceutical business] had a conference in Washington to release its new book to help people start literacy programs. Massachusetts hospitals have produced a literacy handbook. George Washington University's Reading Center developed a program for paramedics. It is a well-designed program which might serve as a model for other programs developing curriculum. The Women's Hospital in Needham, Massachusetts, established an English as a Second Language program.

5. Confidentiality Issues

Some are concerned about the issue of confidentiality in workplace literacy programs. Especially in small towns, some workers will not come forward. One encouraging program assures confidentiality. It is called BETA, and it is a home video study program. Employees receive advertisements at work that the video is available, but the supervisors never know who takes the course. Employees dial an eight-hundred number to enroll. The employer pays for the material. The cost is small compared to the benefits gained. The company gets a monthly printout of what the employees from the company are doing within the course, but no individual names are released. A program like this might get the reluctant employee over the hurdle of being afraid to admit a lack of skills.

6. Two New Industrywide Programs

Two new workplace literacy programs have been released within the last two months. They are industry-specific, as well as industrywide.

The American Banking Institute Program

This is published by Simon and Schuster and was developed over a two-year period. Beanita Summerfield, who used to be at the Department of Education and who now heads the Barbara Bush Foundation for Literacy, is in charge of that program. *Investor's Daily* describes it.

Automatic teller machines may not make mistakes, but bank employees who lack basic reading, writing, and math skills are costing customers time and banks money. Faced with thousands of entry-level workers with inadequate educations, bankers have launched the first industrywide training program for employees and job applicants.

They carried out a study of a hundred banks nationwide and found 20–30 percent of the employees on the front lines—tellers, secretaries, bookkeepers, and customer service representatives—were not skilled enough for their jobs. The program is designed to teach job-related thinking skills needed to perform critical banking tasks of cross selling, customer service, and balancing the cash drawer. It addresses specialized reading, math, communication, and learning problems affecting entry-level bank employees.

Materials include twelve workbook-based modules and placement tests. The tests use banking-specific questions developed from a task analysis of banking jobs. A mainstream program cannot do this. Most modules include pre- and post-instruction tests. Performance problems can be diagnosed and learning gains measured.

Carl Ditty Workplace Program

This is sponsored by the National Association of Printers and Lithographers (NAPL), New Jersey, and the Ditty Corporation. Each group contributed half of the million dollars for the development program. This is the only industry-specific basic skills program for U.S. manufacturing industries. Program development involved more than fifty industry executives, consultants, and educators. Field testing included hundreds of industry employees at field test sites.

An NAPL survey found that 83 percent of eight hundred responding companies recognized problems in the industry related to low basic skills. More than one-third labeled these problems as serious. The association set out to look for a literacy program applicable to them, but they could not find one. Thus, they developed their own with a private consultant.

Exercises and all course materials are industry-specific. Instead of reading about Dick and Jane, employees read about a job jacket, a cutting order, or even a plant memo. Vocabulary exercises emphasize trade words and printing terminology. The curriculum is developed for a national audience, but can be adapted to each particular plant.

A voluntary and anonymous skills inventory is given to the whole company or department. It shows where the skills level deficiencies exist, if any. At that point, the company decides whether they want the program. It establishes a base line of need rarely seen in training programs.

After the skills inventory, trainees go to one of four courses: (1) reading and writing for technical troubleshooting, (2) computation and math, (3) problem solving and critical thinking, or (4) graphic art technology. The program uses local teachers trained at each site.

Both of these programs have workshops available from the national offices to put them into effect.

7. Conclusion

Not only do employers and literacy specialists advocate learning at the workplace, but teachers and employees also are strong backers. Adult learners and new literates at recent conferences recommended that employers take steps to find out if their employees can read, but keep that information confidential. They also recommended that employees not be fired because they cannot read, but that employers require employees to enroll in a literacy program as a condition of promotion or continued employment. And, if not already available, the businesses should start the programs themselves. When employers just feed illiterates or low-level literates into an existing mainstream program in the community, they often drop out because it is not of interest to the employee if it has nothing to do with his work.

The U.S. Department of Labor has taken a strong stand in favor of workplace literacy. Former Secretary of Labor Elizabeth Dole established a commission on achieving the necessary skills to increase basic skills training. Speaking of national needs, David Kerns, Chairman and CEO of Xerox Corporation, at the American Newspaper Publishers Convention in Chicago in 1989, said,

I've been saying for years that one of the best things the Japanese have going for them is their extraordinary high expectation levels in every area. And that includes education. In Japan every student has to meet high standards. The Japanese believe that what really counts is not innate talent, but hard work. They know that if you give people tough but reasonable goals, they will rise to the occasion. They've got the best-educated workforce in the world to prove it. Education reform is not only a timely issue; it is a survival issue for this country. Our future depends on how quickly and how effectively we deal with it.

In closing, I quote from the *Work Force 2000* report,

Private employers have a new and more expensive role to play in the development of their work forces. Not only are they critically affected by the quality of the workers they will hire over the next few years, they are among the most knowledgeable designers and implementers of cost-effective technology-based training programs. If there are any real breakthroughs in training and hiring young disadvantaged workers between now and the year 2000, "second chance" educational systems developed at the work site are likely to play a key role.

References

Packer, Arnold. 1988. Washington Post. July.

Park, Rosemarie J. and others. 1988. The Educational Needs of Dislocated Workers in Minnesota. ERIC_NO: ED300644.

Workforce 2000: Work and workers in the 21st century. U.S. Department of Labor.