DOCUMENT RESUME

ED 359 334 CE 063 592

TITLE	Basic Skills in Small Businesses. Workforce & Workplace Literacy Series. Revised.
INSTITUTION	Business Council for Effective Literacy, New York, NY.
PUB DATE	Jun 93
NOTE	20p.; Revises ED 344 080.
PUB TYPE	Reference Materials - Bibliographies (131) -- Reference Materials - Directories/Catalogs (132) -- Collected Works - Serials (022)
JOURNAL CIT	BCEL Brief; n6 Jun 1993
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Adult Basic Education; *Adult Literacy; Basic Skills; Citations (References); *Education Work Relationship; Instructional Materials; Labor Force Development; *Literacy Education; Program Administration; Program Development; Reading Instruction; Resources; Skill Development; *Small Businesses; Writing Instruction
IDENTIFIERS	*Workplace Literacy

ABSTRACT

This report contains a list of 24 contacts and 15 references concerned with workplace literacy programs in small businesses. Each listing includes addresses and telephone numbers, prices if applicable, and a brief description of the resource or materials. The materials listed are mostly reports of workplace literacy projects in small businesses and training manuals for conducting such programs. The report also contains a summary of the state of basic skills instruction in small businesses today. Copies of articles: "The Large Matter of Small Business" (BCEL Newsletter, July 1990) and "The Missing Link: Workplace Education in Small Business (BCEL Newsletter, July 1992) are attached. (KC)

BCEL
Business Council For Effective Literacy
1221 Avenue of the Americas, New York, N.Y. 10020
212-512-2415/2412

Brief

Workforce & Workplace Literacy
No. 6 Revised June 1993

Basic Skills In Small Businesses

Small businesses, defined by the U.S. Small Business Administration as those with fewer than 500 employees, are key to the American economy. They represent over 99 percent of all firms in the U.S., account for more than half of private sector employment, and generate 47 percent of the gross national product. Most small businesses are very small. Three-fourths of them employ 20 people or less; about half employ between 1 and 4 workers. Nevertheless, they—like their larger counterparts—must confront the ramifications of growing global competitiveness, introduction of new technology into the workplace, and the need for changing work structures. At the same time, there is a growing mismatch between rising educational requirements for the jobs of the 1990s and onward and the nature and qualifications of the country's present and developing workforce. While this dilemma impacts on all businesses, small businesses face an especially difficult challenge in meeting the skills upgrading needs of their workers because of such barriers as cost, lack of awareness and know-how, and lack of management personnel to plan for employee training.

BCEL's July 1990 Newsletter carried a feature article, *"The Large Matter of Small Business,"* discussing the above issues in detail (the article is reprinted in full at the end of this Brief). A number of major reports issued shortly thereafter reinforced BCEL's analysis—including *America and the New Economy* (put out by the American Society for Training and Development) and *Worker Training: Competing in the New International Economy* (from the Congressional Office of Technology Assessment). While action and awareness in the small business universe still lag behind that for medium and large businesses, there have been some other notable advances in the intervening period. For instance, the Southport Institute for Policy Analysis completed a comprehensive two-year inquiry into the state of workforce literacy in America's small businesses. SIPA's findings and recommendations are set out in *The Missing Link: Workplace Education in Small Business* (a detailed summary of which appeared in BCEL's July 1992 Newsletter, reprint attached) and two related publications (see # 11 under References). In addition, other groups have developed new curricular materials; and several skills upgrading programs have been implemented or are being tried out in several small business settings, sometimes as part of a larger workforce/workplace consortium, sometimes on the direct initiative of an individual business.

The federal government has also begun to take an interest in small business literacy needs, as have a handful of states. For example, Title II of the National Literacy Act of 1991 contained provisions for two new programs which will assist small businesses: A National Workforce Literacy Assistance Collaborative within the U.S. Department of Labor (DOL) aims in general to improve the basic skills of persons who are marginally employed or unemployed. The program will help small and medium-sized businesses, unions, and trade associations that represent small and medium businesses develop and implement literacy programs tailored to their specific needs. The National Workforce Literacy Strategies program of the U.S. Department of Education (DOE) will develop, test, and replicate cost-effective and instructionally-effective workplace literacy strategies for the nation through the funding of large-scale models that involve partnerships between and among local, regional, statewide, and industry-wide public and private sector groups. To be developed in consultation with the DOL and the U.S. Small Business Administration, the DOE program will give priority to partnerships involving small businesses. Moreover, the guidelines of the National Workplace Literacy Program of DOE—which has since fiscal 1988 provided funding for literacy projects in both large and small companies—were amended by the

National Literacy Act to place a priority on applications from business-education partnerships that include small businesses.

At the state level, there are also some promising activities under way. Mississippi is the first, and so far only, state to experiment with a business tax credit as a way to motivate both small and large businesses to become involved and invest in employee basic skills programs. Massachusetts and Illinois have for some years had statewide workplace and workforce literacy grant programs set in the context of comprehensive plans, and many small businesses—individually and in consortial arrangements—have been recipients of funding. In 1991, the Governor of California signed into law one of four bills based on the findings of the California Workforce Literacy Task Force. The law requires firms with 25 or more employees to provide assistance with illiteracy problems to any employee who requests it. In Oregon, Virginia, and Connecticut, again as part of comprehensive statewide planning, small businesses are a target of concern.

Contacts

The following people/organizations are operating employee basic skills programs for or in small businesses, providing significant technical assistance in the development of such programs, engaged in research on the issue, or operating grant programs in support of small business projects:

1. **David Mathes, Director, Finger Lakes Regional Education Center for Economic Development,** 111 East Avenue, Suite 221, Rochester, NY 14604, (716) 325-7460. The Center is the education provider for a regional workplace literacy program involving both large and small businesses in the Rochester area. Based on its extensive experience with the program, which includes such giants as Eastman Kodak and the Delco Division of General Motors, the Center has developed curricular materials and a video which are available to other companies and literacy providers. The *Finger Lakes Regional Education Center Workplace Literacy Curriculum* is a generic program to upgrade the basic skills of workers at or above 7th-grade reading level in manufacturing and other business settings. Modules in Workplace Mathematics, Workplace Written Communications, and Workplace Oral Communications include both teacher materials and students' text and activities. The video, *Workplace Literacy: Putting Minds on the Job*, identifies through specific examples some essential elements of successful programs and at the same time illustrates the importance of building programs based on a company's specific needs. Also available is a paper written by Mathes, *"Workplace Literacy: Raising the Floor of Education in the Workplace."* For ordering information on the video, the modules, and the overall curricular program (the paper is free), call the Center at (800) 441-4540, or fax your request to (716) 325-1308.

2. **Donald J. Cichon or Mary Ana Heath, Development Assistance Corporation** (DAC), 410 Dover Point Road, Dover, NH 03820, (603) 742-6300. DAC is currently providing technical assistance in workplace education, including the evaluation of workplace literacy programs, to both large and small businesses in Massachusetts. In 1991 it completed a two-year workplace ESL demonstration project in nine companies, four of which were small businesses. Each company had a different geographical location, approach to employee training, and workforce make-up—as well as an established instructional program for its ESL employees in partnership with an outside education group. DAC's role was to expand and develop the programs to make them more bilingual in nature, make the curriculum more job-related, attend more to the cultural needs of the workers, and develop program components to enhance employee participation. As an outgrowth of the project, DAC developed *Job-Related Training for Limited-English Proficient Employees*. The two-part publication—a "Handbook for Program Developers" and a "Guide for Decision Makers in Business and Industry"—aims to help companies and education/literacy provider groups design their own bilingual basic skills programs. The complete set (presented in a functional binder format) is available from DAC for $59.95; the Guide alone is $10.95 (prices include postage and handling). The Handbook is also available free of charge in xeroxed form from the Clearinghouse for Education and Adult Literacy, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-7240, (202) 205-9996.

3. **Marcellette Morgan, Wayne Community College,** Caller Box 8002, Goldsboro, NC 27530, (919) 735-5151, ext. 261. The College's Project ENABLE (Eastern North Carolina Adult Basic Skills Lab for Employability) is designed to help employees of small businesses in the area improve their job and academic skills in order to keep up with changes in the workplace, and thereby increase productivity. The project was

developed by the North Carolina Rural Economic Development Center and the North Carolina Department of Community Colleges. Now in its third year of operation, ENABLE has worked with 35 small businesses. All instruction is computer-assisted, and one-on-one tutorials are offered to students who cannot read or have other special needs. To recruit companies and students, ENABLE representatives give presentations to small business owners who refer their employees.

4. **Lynn Barnett, Director of Education and Training, American Association of Community Colleges** (AACC), One Dupont Circle NW, Suite 410, Washington, DC 20036, (202) 728-0220. In 1990 the AACC (at that time known as AACJC, the American Association of Community and Junior Colleges) made one-year grants of $10,000 to each of 10 rural colleges around the U.S. The grants were used to initiate partnership programs with local businesses or job training, civic, or government organizations to bring literacy training to their workforce. The participating companies—most of which were small businesses—represented a wide range of industries including food processing, fishing, farming, trucking, and manufacturing. The results of this successful project—including continuation of most of the programs with local funding—are highlighted in both a report and a video. *Rural Workplace Literacy: Community College Partnerships* is a 14-page booklet describing the activities and outcomes of the 10 projects. Limited quantities of the booklet are available at $5 each from Lynn Barnett at the address shown above. The video, *Rural Workplace Literacy*, comes in two lengths: one covers a national teleconference about the project including pre-recorded video segments about each program and a live panel discussion, and the other is a 30-minute edited version. To order the video ($50), contact Bob Crook, Dallas County Community College District, Center for Educational Telecommunications, 9596 Walnut Street, Dallas, TX 75243, (214) 952-0304.

5. **Barbara Radmore, Coordinator, Project Rural Workplace**, 59 Congress Street, Rumford, ME 04276, (207) 364-2012. Project Rural Workplace, a joint effort of the adult and community education units of four school districts in Oxford and Western Androscoggin Counties in Maine, is providing job-related literacy assistance to 17 companies located in rural areas of the state. Project staff help the companies—which vary greatly in size (from 15 employees to 1,640) and the nature of their work—to assess their workplace basic skills needs, design the needed job-related instruction, and actually teach in and run the on-site programs. Depending on their needs, businesses can arrange for courses in such subjects as reading, math, oral and written communications, problem solving, and critical thinking at a wide range of levels. Each company develops its own policies on such matters as paid released time for classes and special recognition of employees who complete their program of study. About 650 employees are being served by the programs at the 17 sites. Program costs are covered by funding from the U.S. Department of Education and in-kind contributions from participating companies. The Project has produced four curricula—*Oral Communications*, *Written Communications*, *Basic Workplace Math*, and *Math for Statistical Process Control*—which can be ordered through Barbara Radmore at the address shown above.

6. **Bob Mullins, Director, RCU, Hinds Community College**, PO Box 1263, Raymond, MS 39154, (601) 857-3312. The Resource and Coordinating Unit for Economic Development (RCU) at Hinds Community College has been serving the business community in the Jackson region since 1989 by providing courses, workshops, and seminars on a contract basis in a broad range of subjects. To assist small businesses that could not afford to offer on-site basic skills classes, RCU acquired two mobile learning labs from CENTEC Learning Systems in Jackson through a lease-purchase arrangement. The labs' computers are programmed to offer instruction in reading, writing, and math to workers with ability levels ranging from 0 through grade 12. The software can also be changed easily to provide computer training or other instruction. The program has incorporated some job-related materials, but is generic in nature with the ultimate goal of helping workers get a GED. Initially, RCU publicized the availability of the labs but today they operate on a virtually full schedule, visiting businesses in the Jackson and Vicksburg areas on a regular basis. The first year's lease-purchase was paid for through contributions from local businesses and some state and local government and college funding. The labs are now on their way to becoming self-supporting, with the companies that use them paying $60 per contract hour (or $6 per student).

7. **Susan Westberry, ABE Supervisor, Maury County Board of Education**, 501 West 8th Street, Columbia, TN 38401, (615) 388-8403. The Basic Education Skills Training program (BEST) was developed in 1989 as a workplace demonstration model by the

Maury County Board of Education in partnership with 14 local companies, representing both large and small businesses. The model is considered suitable for employers who wish to help their workers upgrade their education to a high school level. The program has three unique features: provision of education services to multiple employers simultaneously, scheduling that accommodates both straight and swing shift workers without requiring released time, and the use of a simple half-hour test to identify learning disabled students. During the first 15-month pilot phase of the program, a 73 percent employee retention rate was achieved, as well as an 82 percent high school diploma pass rate. Currently, workers from 15 companies—including ESL and learning disabled GED students—are participating in the BEST program. *The BEST Blueprint: Quality ABE in the Workplace*, an 82-page guide for developing and implementing the BEST program elsewhere, is available as E.D. #324427 through the ERIC Clearinghouse, (800) 443-ERIC.

8. **Forrest Chisman, President, Southport Institute for Policy Analysis** (SIPA), 820 First Street NE, Suite 460, Washington, DC 20002, (202) 682-4100. In 1992, SIPA completed a two-year study of decision-making in small and medium-sized businesses as it relates to employer investments in worker skills upgrading. A major goal was to develop public policy incentives for bringing about a substantially increased private sector investment in workplace basic skills training. See also #11 under References.

9. **Susan Reif, WorkPLACE Program Manager, NAPL Communications**, 780 Palisade Avenue, Teaneck, NJ 07666, (201) 342-0707. The Carl Didde WorkPLACE Program is an industry-wide curriculum developed by the National Association of Printers and Lithographers (NAPL) working with consultant Linda Stoker and representatives of several graphic arts and printing companies. The job-related program aims to bolster the basic skills of the employees of NAPL's 3700 member companies—many of them small businesses—and prepare the workers for career advancement. Five segments of the WorkPLACE curriculum are currently available: the *Manager's Sourcebook*, the *Skills Inventory and Administrator's Manual*, the *On-the-Job Math Computations Course*, the *Critical Thinking & Problem-Solving Course*, and the *Communications Course*. One more segment, the *Graphic Arts Process Course*, is scheduled for release later this year. NAPL has established an information hotline at (800) 258-7323, and can tap into a database of instructors qualified to help with program implementation on a local level. For more information or to order the available WorkPLACE segments, call the hotline or Susan Reif at (201) 342-0707.

10. **Sarah Newcomb, Division of Adult Education & Literacy, U.S. Department of Education**, 400 Maryland Avenue SW, Washington, DC 20202-7240, (202) 205-9872. During the first three years (1988-89 through 1990-91) of its National Workplace Literacy Program, the DOE awarded some $41 million in grants to 149 business-education partnerships. The current (FY93) level of funding for the Program is about $19 million. *Workplace Literacy: Reshaping the American Workforce* (see #12 under References) reviews the first three cycles of funding and offers practical suggestions on how to build an effective program and/or apply for a NWLP grant.

11. **Lloyd David, President, Continuing Education Institute** (CEI), 35 Highland Circle, Needham, MA 02194, (617) 449-4802. CEI is a nonprofit educational provider that has been working with both large and small businesses in the Boston area for a number of years. One of its recent efforts was the establishment in 1991 of a training collaborative with three public hospitals and four private nursing homes. With partial support from a U.S. Department of Education grant, the program provided on-site ABE, ESL, and math instruction—as well as a course leading to a high school diploma—to nursing assistants and dietary and housekeeping workers. CEI developed the workplace-related curriculum and provided the instruction. Even though the DOE funding has ended, CEI is continuing its Adult Diploma Program with six of the partners and two additional hospitals. (The Diploma Program requires enrollees to analyze a variety of skills—problem-solving, communications, interpersonal relations, information gathering and reporting, and technical—in the context of their work experience.) In cooperation with the Chinese American Civic Association, CEI has also produced a publication titled *Teaching and Learning English as a Second Language: Curriculum Development Resources for Nursing Homes*. It explains in detail how a workplace ESL program was implemented in one nursing home in Boston and describes the development of an ESL curriculum for two others. Included in the book are sample lesson plans, workbooks, and other curriculum materials. Available for $25 plus $3.82 shipping and handling from CEI.

12. **Vic Trunzo, Office of Workplace Learning, U.S. Department of Labor**, 200 Constitution Avenue NW, Room N4649, Washington, DC 20212, (202) 535-0548. Through a new program called Technical and Education Assistance for Mid- and Small-Sized Firms (TEAMS), the U.S. Department of Labor is forming a broad-based partnership to help small companies meet their needs for a highly skilled workforce. TEAMS is focusing on workforce literacy, technical training, work restructuring, and labor-management relations. Among the government entities and national organizations working with TEAMS are the Department of Commerce, Manufacturing Technology Centers, and the American Association of Community Colleges.

13. **Judy Williams, Director, Governor's Office of Literacy**, Employment and Training Division, Department of Economic & Community Development, 301 West Pearl Street, Jackson, MS 39203, (601) 949-2178. In 1991 the state of Mississippi, which two years earlier had approved a 25 percent tax credit for companies providing basic skills training to their workers, launched its Skills Enhancement Project (SEP). The operation of SEP is managed by the State Board for Community and Junior Colleges. The SEP helps large and small businesses in the state identify their training needs and develop individual programs to meet those needs. Once programs are actually set up, with the businesses paying a share of the costs, the companies are eligible for the tax credit. Only a year after the tax credit program was announced, some $600,000 in tax credits was awarded to businesses in the state, with the recipients themselves contributing $2.5 million.

14. **Ann Belletire, Workplace Literacy Consultant, Secretary of State Literacy Office**, 431 South Fourth Street, Springfield, IL 62701, (217) 785-6921. For fiscal 1993, the Illinois Workplace Literacy grant program, administered by the Secretary of State's Literacy Office, awarded $476,000 to some 58 companies with matching funds of $1.6 million provided by the recipients. Thirty-nine of the grantees were small businesses. (A provision in the FY93 grant program was designed to encourage more participation by small businesses by permitting those within the same industry—e.g. tool and die casting—to apply jointly for funding with one firm serving as fiscal agent.) The Literacy Office also serves as a statewide information clearinghouse on employee basic skills programs and literacy providers, and provides technical assistance to help businesses implement basic skills programs.

15. **Cheryl Judice, Executive Director, GRASP Adult Learning Center**, 825 Chicago Avenue, Evanston, IL 60202, (708) 328-4420. GRASP, established in 1975, works with small businesses in the Chicago region, primarily providing basic skills and ESL courses at the worksite as needed. The curriculum is customized to each particular job setting. Safety Kleen, a small manufacturer and service company, is one of its recent clients.

16. **Kathy Rentsch, Project Coordinator, Workplace Education, Quinsigamond Community College**, 670 West Boylston Street, Worcester, MA 01606, (508) 853-2300, ext. 358. Over the past five years, Quinsigamond Community College has operated ESL, basic skills (including math), and GED classes for over 25 employers, many of them small manufacturing companies and hospitals. Quinsigamond works with companies on an individual contractual basis or through consortial arrangements supported by public sources.

17. **Linda Mrowicki, Project Director, or Monica Lynch, Project Coordinator, Workplace Education Division of THE CENTER - Resources for Education**, 1855 Mt. Prospect Road, Des Plaines, IL 60018, (708) 803-3535. The Workplace Education Division provides customized basic skills courses, using a functional context approach, to business and industry in Northern Illinois. Since 1988 it has served 64 companies, the majority of which are small and medium-sized manufacturers as well as clients from the hotel, restaurant, house care, and financial service industries. Division staff design instruction based on needs assessment and literacy task analyses of selected departments and jobs. Instructors then deliver the courses on site either on company time or partial released time. The Division operates primarily in partnership with businesses and a variety of federal and state workplace literacy grants. Four products developed by the Division are available for $8 each prepaid: *Basic Skills Core Curriculum for the Manufacturing Industry, Workplace Literacy Core Curriculum for Beginning ESL Students, Resource List of Commercial Workpiace Basic Skills Materials for the Manufacturing Industry,* and *Best Practices for Quality Basics Programs in the Manufacturing Industry*. To order, contact the Workplace Education Division at the address shown above.

18. **Fred Ritzau, Vice President, Human Resources, United Electric Controls**, 180 Dexter Avenue, Watertown, MA 02172, (617) 926-1000. United Electric Controls Company is a family-owned business which manufactures temperature and pressure instruments for chemical plants, refineries, fast food outlets, and other processing industries. The company has a workforce of 450 people, 350 of them based at its headquarters in Watertown. Headquarters is the site of an employee ESL program begun in 1987 with funding from the Massachusetts Workplace Education Initiative. The program began after a supervisor formed an "action center," a process by which small groups of workers come together to solve workplace problems. The problem in this case was that many employees had difficulty understanding job instructions because of their limited knowledge of English. So the group conducted a survey which confirmed the need for ESL help. The result was a collaborative effort in which the Middlesex County Employment and Training Department designed the job-related curriculum and initially provided the teachers. Classes, which are now taught by in-house staff, are given primarily on paid time and meet 2 1/2 hours twice a week (including the workers' half-hour lunch break). The program, which is strictly voluntary, has become an ongoing part of the overall business operation and a tool for worker involvement in implementing company strategies. When new policies or programs are introduced in the workplace, they are discussed in class. Over the past six years, the program has expanded to include basic skills and math as well as ESL. As part of the initial funding agreement, the state's role was to be a gradually decreasing one, and today United Electric covers 100 percent of the costs.

19. **Donna Sizemore, Vice President of Communications, WAVE**, 501 School Street SW, Suite 600, Washington, DC 20024-2754, (202) 484-0103. Formerly known as the 70001 Training and Employment Institute, WAVE (Work, Achievement, Values & Education) is a national nonprofit organization established in 1969. Through a national network of community-based programs in which drop-out recovery services are provided, it offers young adults training in basic skills and employability skills. It also has experience in providing work-based basic skills and employability training for small businesses. With funding from the U.S. Department of Labor and in cooperation with the National Federation of Independent Business, in 1989 it surveyed the basic skills attitudes, practices, and investments of some 16,000 small businesses. Then, based on the survey results, through mid-1991 it carried out a national demonstration project involving small businesses in the childcare, printing and publishing, and auto repair and service industries. Working with and through professional and trade associations, it conducted job task analyses in a sampling of small businesses in each industry, assessed employee skills needs, and otherwise helped the associations plan for suitable programs of instruction. In one case, childcare, it also developed and implemented the actual employee program.

20. **Mark Emblidge, Executive Director, Virginia Literacy Foundation**, PO Box 1125, Richmond, VA 23208, (804) 225-8777. Together with the State Office of Adult Literacy, the Virginia Literacy Foundation has placed workplace education specialists in five community colleges around the state to serve as brokers between local employers and adult education organizations, help match employers with suitable literacy service groups, foster the development of small business consortia, and map out strategies tailored to local needs and resources.

21. **Jorie Philippi, President, Performance Plus Learning Consultants**, 6 California Avenue, Charleston, WV 25311-2201, (304) 343-6861. Performance Plus is a national technical assistance organization which specializes in developing workplace literacy programs for small and medium-sized businesses. The group has years of solid experience and has also developed job-specific curriculum and tests for the military, educationally disadvantaged young adults, large corporations, state and federal agencies, private industry councils, and others. In addition, it has done major work with the textile, metalworking, industrial maintenance, and banking industries. Ms. Philippi operates a regular program of workshops and seminars around the country, usually offered in conjunction with her workplace skills program training manual, *Literacy At Work: The Workbook for Program Developers* (see #1 under References). In collaboration with the Dallas County Community College in Texas, Ms. Philippi has very recently developed an excellent video/print, job-linked workplace literacy train-the-trainer program, *Retraining the Workforce: Meeting the Global Challenge* (see #13 under References).

22. **Bob Cumming, Director of Economic Development Workplace Learning, ED>Net**, 9623 Hazard Street, Garden Grove, CA 92644, (714) 531-7440. In August 1991 the Chancellor of the California Community Colleges established workplace

learning resource centers at four geographically-dispersed sites—El Camino, Fullerton, and Rancho Santiago Colleges and the San Diego Continuing Education Centers—to serve in part as training delivery points for large and small businesses that want to develop employee skills upgrading programs. Three more centers have been added since that time—at Oxnard, American River, and Mission Colleges—and another three are expected to be in operation in 1994. The Centers—designed by a statewide Workplace Literacy Resource Committee—are staffed by personnel from the California Community College Economic Development Network (ED>Net) and are funded by the Chancellor's Office, the site institutions, and company fees.

23. **Jo Ann Weinberger, Executive Director, or Sandra Choukroun, Center for Literacy**, 636 South 48th Street, Philadelphia, PA 19143, (215) 474-1235. With funding from the Pew Charitable Trusts, the Center for Literacy very recently launched a Small Business Training Initiative—an innovative two-year project to assist small businesses in the Philadelphia area which do not have the resources to implement workplace literacy programs. The Initiative presents a unique opportunity for workers from companies in the same industry or in the same geographic location to be trained together at a central place. Participating businesses will receive at no cost pre-training analyses of job-skill requirements, employee training programs reflecting specific instructional and logistical needs of individual worksites, professional staff with experience in job-skills training, print-based materials and access to computer-assisted instruction, and post-training assessment of employee educational gains and indicators of improved job performance. The program will also include information on changing trends in participating businesses and industries, new developments in manufacturing and customer service, and the role that hourly workers can play in reviving the economy. Wallace Products and member companies from the Cecil B. Moore and Ridge Business Association, the Susquehanna Business Association, and the 22nd and Allegheny Business Association are among the first to sign up for the Initiative.

24. **G. Rives Neblett, Chairman of the Board, Shelby Die Casting Company**, Box 63, Shelby, MS 38774, (601) 398-5121. In October 1991 the Shelby Die Casting Company was on the verge of closing its Shelby plant, which employs 100 people, because of its inability to meet the new quality, efficiency, and service demands of a changing economy. Instead, Shelby owner G. Rives Neblett chose to institute new management techniques and revamp the organization and plant procedures. To accomplish this, training was needed to prepare the workforce, many of whom read at only a third grade level, to function in a workplace that would require a high level of decision-making and teamwork on their part. The company worked with Coahoma Community College and the Mississippi State Department of Vocational Training first to assess its workers' skills, then with Coahoma to design a functional-context curriculum with materials drawn from employees' jobs and their daily lives. In addition, Mississippi State University designed technical training manuals based specifically on operations at the Shelby plant. The basic skills and technical training—which includes basic literacy, GED preparation, die casting operator training, statistical process control, blueprint reading, industrial electrical training, and quality control—is delivered by in-house staff and instructors from the Bolivar County Literacy Council. Although the classes are voluntary and held on the employees' own time, virtually the entire workforce participates, many of them moving from basic skills to GED, and into technical training courses. The company plans to add a computer lab and a full-time training coordinator to the staff and to expand the curriculum even further. Since the introduction of the workplace literacy program and the organization changes that the program made possible, the Company's profits have improved by more than 100 percent. Technical assistance from the Community College is available through a statewide program funded by a combination of state and federal sources. All other costs are paid for by the company.

[Note: In addition to those listed in this Brief, several other national technical assistance groups offer help in designing and implementing skills upgrading programs for small businesses. A description of them and their qualifications is given in BCEL Brief #2.]

References

1. **Literacy At Work: The Workbook for Program Developers** is a workplace skills program training manual developed by Jorie Philippi of Performance Plus Learning Consultants. The manual is designed to help businesses implement effective job-related basic skills programs. It is available for $200 from Order Department, Simon & Schuster Workplace Resources,

200 Old Tappan Road, Old Tappan, NJ 07675, (800) 223-2336. Performance Plus offers seminars and workshops to train local organizations in program implementation and use of the manual (see #21 above).

2. **Workplace Education Efforts in Small Business: Learning from the Field**—prepared by Berkeley Planning Associates for the U.S. Small Business Administration, March 1991. The study analyzes workplace literacy programs at 18 small companies—examining such issues as employer motivation, needs assessment, program start-up and operating costs, curriculum content and instructional approaches, support services, measures of success, and models for program delivery. The report reveals that all of the programs were begun at no cost to the companies through the efforts of outside professionals and public funding and that, once under way, at least half of the employers were willing to continue the programs at their own expense. It also identifies a number of steps that can be taken either to increase participation by small businesses in literacy programs or to improve the quality of already-existing programs. Available for $27, plus $3 handling, from the National Technical Information Service, U.S. Department of Commerce, 5825 Port Royal Road, Springfield, VA 22161, (800) 553-6847.

3. **Workplace Basics Training Manual**—Carnevale, Gainer & Meltzer for the American Society for Training and Development, 1990. The manual provides step-by-step guidelines for planning and implementing an effective workplace skills program, including how to perform a task analysis, design the curriculum, do a cost benefit analysis, and evaluate program results. One chapter is devoted to types of providers, including a discussion of the important and growing role that community colleges can play in the delivery of services. Available for $38.95 from Jossey-Bass, Inc., 350 Sansome Street, San Francisco, CA 94104, (415) 433-1767. A companion book, **Workplace Basics: The Essential Skills Employers Want,** analyzes what skills employers are looking for and need in the workforce of today and tomorrow. Also available for $38.95 from Jossey-Bass.

4. **WORKER TRAINING: Competing in the New International Economy**—from the Congressional Office of Technology Assessment, September 1990. This comprehensive state-of-the-art study examines U.S. worker training and retraining needs in an international context and in terms of what it will take to maintain the American standard of living and remain globally competitive. A major focus of the study is the special problem that small businesses face. The report concentrates on skills upgrading for already-employed workers because this will have the greatest competitive impact in the near and medium term. Available for $12 from the Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954. To order by telephone (charge or GPO deposit accounts), call (202) 783-3238. Specify Stock #052-003-01214-6.

5. **America and the New Economy**—by Anthony Carnevale of the American Society for Training and Development (ASTD), 1991. Based on five years of applied research in the world of work, the study discusses the forces that are shaping the "new economy," and the corresponding new skills and higher levels of literacy that will be required of American workers. The report emphasizes that investment in employee training pays off in increased productivity. It calls for a much greater commitment on the part of employers to training workers at all levels and in companies of all sizes. Available for $30, plus $2.25 shipping and handling, from ASTD Customer Service, 1640 King Street, Box 1443, Alexandria, VA 22314-2043, (703) 683-8129.

6. **A Review of the National Workplace Literacy Program**—by Pelavin Associates, Inc. for the U.S. Department of Education (DOE), May 1991. The study looks at 37 programs funded by the DOE's first round of national workplace literacy grants in FY 1988. It identifies a number of characteristics shared by effective workplace programs and also recommends ways to improve and guide future grantmaking in the ongoing DOE program. In conducting its review, Pelavin made site visits to six of the programs, including small businesses, which are profiled in the report. For a free copy, contact DAEL Clearinghouse for Adult Education & Literacy, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-7240, (202) 205-9996.

7. ***Smart Moves for Small Business***, U.S. News & World Report, June 3, 1991. This feature article discusses the critical shortage of skilled workers as one of five major issues that small businesses must address if they are to remain competitive in the decade ahead. Examples of a successful in-house apprenticeship and a job-related training effort involving several manufacturers are put forth as possible program approaches.

8. ***Key Business Information Resources*** is a descriptive brochure listing U.S. Small Business Administration publications with prices and ordering instructions. The brochure is available from the Office of Advocacy, U.S. Small Business Administration, Mail Code 3114, 409 3rd Street SW, Washington, DC 20416, (202) 205-6958. Among the publications currently highlighted is the newly-revised **The States and Small Business: A Directory of Programs and Activities, 1993 Edition** (450 pages). It gives a state-by-state breakdown of offices and programs designed to aid small businesses through loans, loan guarantees, joint ventures, minority assistance, counselling, help with regulatory requirements, and other development assistance. The Directory also highlights state government committees, advisory councils, and task forces that deal with small business issues; provides summaries of recent state legislation affecting small businesses; reports on state small business conferences; and lists the 700 Small Business Development Centers and Subcenters located nationwide. Available for $21 including postage from New Orders, Superintendent of Documents, PO Box 371954, Pittsburgh, PA 15250-7954. To order by telephone (charge or GPO deposit accounts), call (202) 783-3238. Specify Order #045-000-00266-7. Available for $16 is **The State of Small Business 1992** (the President's annual report to Congress). Specify Order #045-000-00265-9.

9. **An Employer's Guide to Education in the Workplace: Facts, Programs, & Resources** (20 pages) presents a brief overview of workforce education in the state of Florida and provides a list of adult literacy providers (ABE, Laubach, and LVA) by county. **Workforce Education Programs in Florida** is a county-by-county directory of programs run by adult education providers in the state as of 1991. Each entry includes the names and addresses of the educational provider and the business/industry contact along with information on the target group served, the nature of the program, and the role of the participating business/industry (recruiting, in-kind donations, recognition). For free copies of the publications contact John Lawrence, Division of Vocational, Adult, & Community Education, Department of Education, 325 West Gaines Street, Room 1224, Tallahassee, FL 32399, (904) 488-8201. **Workplace Literacy: Bottom Line Business Strategies**, developed by the Florida Chamber of Commerce, analyzes why employee basic skills are essential to the future economic and social well-being of the state, gives guidelines to Florida businesses on what they need to do, and illustrates its recommended actions through case studies of ten businesses. Available for $11.33 (plus $.79 tax within Florida) from the Florida Chamber of Commerce, PO Box 11309, Tallahassee, FL 32302-3309, (904) 425-1210.

10. **Closing the Gap: Meeting the Small Business Training Challenge in Connecticut**—by Richard C. Harwood, 1989. This report analyzes the obstacles and opportunities for meeting the training needs of small businesses in the state. Public and private sector action is called for in four areas: strengthening the content of on-the-job training programs, improving delivery of such programs, increasing communication between suppliers and consumers of training, and developing better coordination. Copies are available for $10 from Jobs for the Future, Suite 306, 1815 Massachusetts Avenue, Cambridge, MA 02140, (617) 661-3411.

11. Three publications from the Southport Institute for Policy Analysis—resulting from its two-year study of decision-making in small and medium-sized businesses as it relates to employer investments in basic skills training—are available as a set for $40 or individually at the prices shown below. Send prepaid orders to the Southport Institute, 820 First Street NE, Suite 460, Washington, DC 20002, (202) 682-4100:

- **Ahead of the Curve: Basic Skills Programs in Four Exceptional Firms** (56 pages) analyzes and details the elements of highly successful employee basic skills programs at the William Dudek Manufacturing Company in Chicago; Harbor Industries in Grand Haven, Michigan; Phoenix Specialty Manufacturing in Bamberg, South Carolina; and Weber Metals in Paramount, California. The cases presented are drawn from among some 72 studied by the Institute. ($25.00)

- **The Missing Link: Workplace Education in Small Business** (130 pages) discusses the major findings of the SIPA study (see attached reprint of BCEL's July 1992 feature article). It looks at what small businesses are doing and not doing to upgrade their workers' basic skills and the factors and barriers that account for their action or inaction in this area. The report makes a number of recommendations for public and private sector action, among them a proposal for a major new federal initiative for workplace education modeled after the Cooperative Extension Service of the Department of Agriculture. ($17.95)

- **Smart Workers, Smart Work** (60 pages) presents the technical data from the project's linked national surveys on workplace education and the reorganization of work in small and medium-sized businesses. ($17.95)

12. **Workplace Literacy: Reshaping the American Workforce** is a 1992 publication of the U.S. Department of Education (DOE). The 93-page report reviews the goals and accomplishments of the DOE's National Workplace Literacy Program in its first three years of operation, which included grant awards totaling $41 million to 149 business-education partnerships. More importantly, it analyzes and assesses what has been learned from the experience, makes recommendations for enhancing workplace program effectiveness, and gives a number of practical suggestions for future grant applicants. (As noted in the introduction to this Brief, effective fiscal year 1992 the Program's guidelines were amended by the National Literacy Act to place a priority on applications from business-education partnerships that include small businesses.) The publication is designed to disseminate information and help point the way for businesses, labor organizations, and educational institutions that may recognize the need for worker skills upgrading but are unsure of how to proceed. Available without cost from the Clearinghouse of Adult Education and Literacy, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-7240, (202) 205-9996.

13. **Retraining the Workforce: Meeting the Global Challenge** (1993) is a video-print, train-the-trainer program that recreates for users the entire process of developing, implementing, and evaluating a job-linked workplace literacy program at an actual small manufacturing company in Dallas. The program was developed by the Dallas County Community College and Performance Plus Learning Consultants. Six print manuals parallel the videocassettes, providing how-to guidance and hands-on practice. They are *Marketing Workplace Literacy, Identifying Critical Job Tasks, Conducting Literacy Task Analyses, Designing Training Content, Implementing Assessment and Recruitment,* and *Measuring Program Effectiveness.* Interspersed in the six videos are interviews with Performance Plus' Jorie Philippi. The program is designed for business owners, human resource and training specialists, curriculum designers, and others with an interest in developng job-linked workplace literacy. It also would form an excellent base for a community college course. The video/print package is $495. A replacement set of the six training manuals is $60. (The program is supplemented by two optional *Facilitator's Guides*, one for a 16-hour nonacademic course at $85 and the other for a 48-hour academic course at $165.) For more information, contact Jennie Ball LeCroy, Center for Educational Telecommunications, Dallas County Community College District, 9596 Walnut Street, Dallas, TX 75243-2112, (214) 952-0332.

14. **Education in the Workplace: An Employer's Guide to Planning Adult Basic Skills Programs in Small Business and Industry in Massachusetts,** by Laura Sperazi, offers detailed guidance (including checklists) on how to assess a company's workplace literacy needs and design a program to meet those needs. Case studies are presented to show how several small businesses in the state have dealt with their literacy problems. Massachusetts residents can obtain free copies from Katherine Carroll-Day, Department of Employment Training, 19 Staniford Street, 4th Floor, Boston, MA 02114, (617) 727-6480. All others can order the guide for $35 from Laura Sperazi, Evaluation Research, 130 Warren Street, Newton Center, MA 02159, (617) 527-6081.

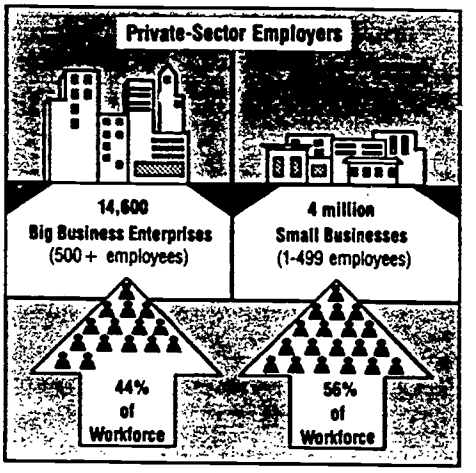
15. **Today's Small Business for Tomorrow: A Skilled Workforce** is a report on five regional hearings conducted during the summer of 1992 by the U.S. Small Business Administration in cooperation with the Center for Workforce Preparation and Quality Education of the U.S. Chamber of Commerce. At the hearings, small business owners discussed what they were doing and what problems they face in maintaining and building a skilled workforce. Part I identifies and pulls together the issues and problems discussed and presents a range of general recommendations. Part II focuses on what the SBA in particular needs to do, and Part III profiles several small business programs that are presently operating with some success. Available free from the Small Business Administration, 409 3rd Street SW, Washington, DC 20416, (202) 205-6533.

BCEL BUSINESS COUNCIL FOR EFFECTIVE LITERACY

ADULT LITERACY: PROGRAMS • PLANNING • ISSUES Newsletter For The Business & Literacy Communities

NO. 24 JULY 1990

THE LARGE MATTER OF SMALL BUSINESS



That U.S. growth and world markets have become tightly interwoven and the American economy increasingly internationalized is by now clear to everyone. What may not yet be fully appreciated is the extent to which new patterns of work organization need to be adopted in companies of all size and types throughout the country. To be sure, a number of companies are already moving in this direction, but according to *America's Choice: Higher Skills Or Lower Wages?* – the powerful new report just released by the Commission on the Skills of the American Workforce (see News In Brief, p. 5) – the nation has only scratched the surface and there will need to be a radical restructuring of work throughout the economy, as a national priority, if the U.S. is to increase productivity and the American standard of living protected.

Along with this national imperative, indeed hand-in-hand with it, every major report of the last two years makes it abundantly clear that developing a higher skilled workforce, literally across the board, must be an equal priority. As Secretary of Labor Elizabeth Dole recently put it: "The basic skills of our workforce are eroding at an alarming rate. Many of our workers are unready for the new jobs and the new realities of the 1990s. We face nothing less than a workforce crsis."

The best forecasts are that by the end of the decade, for the first time in history, a majority of new jobs will require some postsecondary education. There will be fewer jobs for people in low skills categories (27% of new jobs compared to 40% today). Jobs that require a middle level of skills today will be the least skilled occupations of the future.

But demographic shifts are moving us in an opposite direction. As recent studies have shown, between 1986 and the year 2000 the rate of population growth will decline to nearly its lowest level in the 20th Century. The working age population will grow older and the pool of young workers will shrink. It will also be a more disparate pool: 28% of labor force growth will be Hispanic; over 17% black, over 11% Asian-American; and women will make up 60% of the potential growth. In short, non-whites, immigrants, and women will together constitute 80% of the new entrants into the workforce, though they comprise only about half of it today – and these population groups tend to be the most disadvantaged and the least skilled!

Moreover, three out of four adults who will be employed well into the next century are already at work. Of these, 23 million workers presently read at an 8th grade level or less; 11-14 million at 4th grade or less.

The growing mismatch between rising educational requirements and the nature of the present and developing workforce falls hard on all businesses. But it falls hardest on the nation's small businesses which have fewer resources and fewer options than their larger counterparts.

Ironically, the lion's share of national attention – in the form of research, federal and state legislation, and public funding for workplace literacy – is focused on big business. Yet, the dominant form of business in the U.S. is small. According to the U.S. Small Business Administration [*Workplace Literacy: Targeting the Future*, 1988], small firms represent over 99% of all firms in the U.S.! They are, then, at the very heart of the American economy and our ability to increase overall productivity, remain globally competitive, and protect our standard of living. What affects them affects us all.

Small Businesses: A Thumbnail Sketch

Item. Small businesses, as defined by the Small Business Administration (SBA), are those with fewer than 500 employees. *There are more than 4,000,000 small businesses across the country*, as contrasted to only 14,600 business "enterprises" having more than 500 workers.

Item. *Small businesses account for more than half of private sector employment (56%) and generate 47% of the gross national product.*

Item. *Most small businesses are VERY small.* About 2 million of them employ from one to four persons. Another 1.3 million employ between 5 and 20 persons. Those with 100-499 employees, usually refered to as "medium-sized" businesses by SBA, number fewer than 100,000.

(Cont'd on p. 5)

CONTENTS:

SMALL BUSINESSES

(Cont'd from p. 1)

Item. *Small businesses generate two out of every three new jobs in America* – for which they have been dubbed "the job machine." They are labor intensive, in contrast to big companies where capital is substituted for labor. About 10.5 million new jobs were created in American business between 1980 and 1986; almost two-thirds of it came from small businesses. More than a third came from businesses with fewer than 20 workers.

Item. *Small businesses have shorter tenure on the job and a higher turnover rate than large ones*. For example, a 1984-85 study for the SBA by Berkeley Planning Associates showed that 27% of workers in small firms left their jobs that year, compared with 15% of workers in larger firms. In part, this is related to the kinds of workers they tend to hire: low-skilled entry level workers, teenagers, women re-entering the job market, older persons, and part-timers – in short, those with a weaker or temporary attachment to the labor market.

Item. *Small businesses pay lower wages than large ones*, partly because they are heavily concentrated in the service sector. This contributes to the greater movement in and out of jobs. For example, according to a 1988 report by SBA [*Small Business in the American Economy*], the hourly small business wage in 1984 was less than $5 for 56% of firms having 100 or fewer employees, and between $5-10 for 34% of such firms.

High Turnover: A Special Issue

The Commission on the Skills of the American Workforce reports that one-third of all American workers today – some 35 million people – are part-time, temporary, or under short-term contract, ...ting up a huge "contingency" workforce. Be...e this body of workers is not seen as promotable ...ermanent, employers have no reason to invest in ...eir training and upgrading. This turnover is costly in both productivity and quality of work. While employers enjoy the advantage of paying lower wages and having a workforce they can shrink or expand to fit their fluctuating labor force needs, they pay a price: the loss of productive workers to competitors ... the burden of greater paperwork associated with payrolls and regulatory requirements... loss of employee loyalty... the diversion of management away from production activities to recruitment and hiring... and the like. *In a smaller firm, a single vacancy is generally more disruptive than in a large one, even if it can be filled quickly and with minimal training.*

The Impact Of Computers

Some 70% of American firms having more than 10 employees are already using computers. Their use implies the ability to read and to process the information generated. It is worthy of note that while manufacturing firms lost employment from 1980-86, the losses were concentrated in very large companies, particularly in auto and steel production. Manufacturing firms with fewer than 100 employees actually added 800,000 employees during this period. This came about through the use of computerized machine control technology which made it feasible to turn out goods in shorter production runs, and through an increase in "contracting out" to big firms for production of subcomponents and sub-assemblies. Small businesses, again like their larger counterparts, will be even more computerized in the coming years, with the greatest growth in very small firms, further increasing the pressure for skills upgrading and other educational services.

Direct Barriers To Skills Upgrading

There is little more than anecdotal information about the extent of employer-based basic skills programs in American business and industry. But recent research strongly indicates tht only a miniscule percentage of company training expenditures currently go into basic skills programs. According to the American Society for Training and Development (ASTD), the nation's employers spend about $30 billion per year in direct costs for formal training courses that they either provide themselves or buy from outside providers – excluding wages paid while employees are participating in the training. This represents, on average, 1-2% of payroll. Additionally, about $180 billion is spent on informal training. In an article published in the February/March 1990 issue of the *AACJC Journal*, Anthony Carnevale, chief economist at ASTD, estimated that "companies are spending only about $250 million of the $30 billion formal training pie on reading, writing, math, and other basic skills."

Moreover, not only does "training" not usually mean basic skills, but it rarely extends to entry-level workers. Only about 13% of American workers get formal on-the-job training, and mostly they are the more highly educated personnel: managers, supervisors, professionals, and upper level technical workers.

If little is known about workplace skills programs and expenditures in bigger companies, even less is known about small businesses and how they fit into the overall scenario. "No statistics are published by the federal government on training,' says the SBA. And "data on training by firm size are even more difficult to obtain."

Here is some of what is known, however, largely from the work of SBA, ASTD, and, more recently, The 70001 Training & Employment Institute. *(Note: In a project for the U.S. Department of Labor, the Institute is working to develop models of structured workplace learning for small businesses. The Institute has examined the training practices of several thousand firms with under 100 employees, averaging 20 employees per firm, in industries projected to be among the fastest growing. In a recent and as-yet-unpublished report to DOL, the Institute reconfirmed or provided anew many of the facts that follow.)*

SMALL BUSINESSES

(Cont'd from p. 5)

• Because small businesses provide the majority of new workers with their first work experience, they are at the frontline of teaching work socialization: punctuality, perseverance, how to get along with fellow employees, communicate with the supervisor, accept responsibilities, and the like. Thus, they contribute significantly to the general productivity of the workforce.

• The nature of the work environment in small firms forces them to demand more from their employees than larger firms do. "In a small business," says the Institute, "every person is critical. Each person is very much on his/her own, making hourly decisions ... Small firm employees pitch in when and where they are needed, which requires them to understand and function in a wider range of skill areas. Job descriptions are less defined than those in larger firms."

• While it might be expected that small firms would compensate for the low skills of their marginal workforce with job-related basic skills programs, in fact, according to the Society for Human Resource Management, "almost half of employers with 500+ employees provide some basic skills instruction, while only 19% of firms with fewer than 100 employees, and 18% of firms with 100 to 499 employees, do so."

• Of the companies surveyed by the Institute which do not provide basic skills services, nearly half said that they do not hire persons with basic skill deficiencies so have no need to do so. More than a third of the companies surveyed said their employees have no need for such services. Among the smaller companies, nearly one-fifth identified a lack of expertise in assessing and meeting remedial needs, and 15% said workplace literacy programs are not their responsibility.

• The education that is provided to small business employees is mostly general job training, and not addressed to job-specific basic skills needs. It tends to be more informal and unstructured than in large companies – following the boss or supervisor around to get oriented to the job, for example, or watching co-workers, generally trial and error. This is largely because each and every employee is needed on the job. Time away from the shop floor or desk substantially disrupts operations. In larger firms, when an employee is absent or off-site to attend classes there are others on hand to make up for it.

• To the extent that formal training does occur in small businesses, it generally occurs off-site. Lacking internal resources, small firms have no choice but to turn to outside sources for their training needs. ASTD indicates that large companies buy almost 40% of their formal training from outside providers, mid-size employers buy an even larger share outside, and small employers go outside for nearly everything. [Note: The problem here is that most outside provider groups are not themselves trained in assessing workplace needs and designing workplace programs.]

• The greatest barrier to any kind of small business education is the problem of costs. Over half of the firms reporting to the Institute say outright that they can't afford the educational services they would like to provide. Indeed, it is the "perception" of the vast majority that such programs are simply too expensive an investment for their small-scale operations.

• Most analysts think that for small businesses to meet their employees' educational needs, they will need to link with local or state consortia or even to turn to bigger businesses for help. Yet, small firms have a natural fear of losing their trained workers through such arrangements. They tend to see "up" as "out," and the huge turnover problem is already a major disincentive. Nearly half of all small employers view their turnover as too high to justify the cost.

• It is perhaps encouraging that a majority of the firms surveyed by the Institute said they would increase their "training" activity over the next 3-5 years – reflecting presumably a growing concern about workforce quality. But the smaller companies indicate that they will not make an investment on which they will not receive significant and immediate return. Moreover, small firms, unlike big ones, tend not to have human resource directors, in-house divisions, or consultants to manage and develop training. The boss or the boss's spouse or the secretary, each consumed with many other duties, must often deal with these and other matters. Put another way, the resources are simply not there to address the multiple factors that must be taken into account if skills problems are to be met.

The implications are clear. And they are disconcerting. While there may well be a dawning consciousness among small businesses about workforce skills upgrading needs, most small employers do not yet grasp just how serious the problems are that face them just around the corner. In the main, it hasn't hit home that with the looming labor shortage and the graying of the workforce, they will be less and less able to turn to the traditional pool of entry-level workers. "Demographics are going to force the issue," says SBA economist Thomas Grey. The bottom line is that "if small businesses don't increase productivity, they won't survive." They will have no choice but to compete with big business and pay higher wages.

This, in fact, is already happening. The National Federation of Independent Businesses reports that the number of small firms paying higher compensation rates has risen steadily over the past two years, an increase that correlates with local labor shortages. Moreover, the older workers who will have to be hired in the years to come will want and need health and pension plans, which are offered only infrequently by small businesses now. All of this will increase costs. The choice that confronts small business is either to cut profits, to cut wages in exchange for benefits, or to increase productivity and let that pay for the higher cost of doing business. But to increase productivity, a more highly skilled workforce will definitely be required. So we have come full circle.

To compound things, while many small employers are beginning to see that job-specific skills training will be necessary to prepare workers for handling sophisticated equipment and processes, neither they, nor large employers for that matter, adequately recognize that persons who function at severely low levels of English speaking, reading, writing, and math won't automatically be able to succeed in a skills upgrading program. They may first need help with more basic "social coping skills." Where new immigrant groups are concerned, for example, ESL experts consider the development of speaking and listening skills, and often psychological counseling and workplace acculturation, to be prerequisites for learning to read and write.

Given the complex scenario outlined above, and the immense pressures on small businesses, the challenge to them and the nation is daunting. How can attitudinal problems be overcome? What kind of programs should be designed, and how? How will it all be paid for? Who should be responsible for what? What are the public policy implications? How can the logistical problems be addressed? The sheer number of small businesses and the isolated circumstances in which many of them operate make it impractical to deal with certain of their problems individually: wholesale strategies that address common problems seem to be needed. These and numerous other questions loom large and there are no easy answers.

Two Prototypes To Consider

Rochester, New York. In some places, the driving force bringing small employers into basic skills programs is concern with the quality of their products. Rochester, a heavy manufacturing region, is an excellent example. Many of the small companies in the area are part of vast supplier networks to major corporations such as Xerox, Eastman Kodak, and others. The AC Rochester Products Division of General Motors, for example, the division responsible for fuel injectors and catalytic converters, has 2,446 suppliers in that region alone. Eastman Kodak has over 400 minority and women-owned suppliers. These giant corporations set quality standards for their own products and impose them on their suppliers as well. They often set a time by which a supplier must reach a set standard of statistical process control, a system for monitoring product quality, and warn that the relationship is in jeopardy if the goals are not met.

The small businesses in turn buy automated equipment to meet these goals. In addition, many of the suppliers, which may range from 10 to 200 employees, are adopting "cellular manufacturing" or "high performance work teams" like those long used in Japan. These are groups of flexible workers able to produce a variety of products, with each team member knowing the jobs of all the other members of the cell. Each cell may consist of perhaps 8-16 workers.

To operate the new equipment, workers need greater basic skills proficiency. Working together in the cells requires higher communication skills. For statistical process control, which is a subset of mathematics, they need better math skills.

The agency that serves them is the Finger Lakes Regional Education Center for Economic Development, one of 10 New York economic development regions operated by the state education department. The Center is a consortium of education providers. It includes the Rochester city school district, the vocational technical high schools, and the two- and four-year colleges, all of which draw in the small businesses through the supplier network and the unions, the latter playing a vital role.

The Center has developed generic curricula for the basic skills needed in the workplace, as well as a curriculum in statistical process control, in decision-making, problem-solving, and basic computer literacy. These were designed into mastery learning modules, with the modular units planned so that appropriate instruction can be plugged in and delivered anywhere as needed: on site, in a learning center, the union hall, or wherever appropriate. Because Rochester is a wide-spread region, the providers are assigned to specific geographical areas. But because of the pre-packaged modular curriculum, employees in the smallest tool company with 50 or so employees in the outermost corners of the state receive the same advantages of training as the large in-house programs in Rochester such as Eastman Kodak, say, with its 46,000 employees.

By all reports the system works. Union members know that to stabilize their jobs they must upgrade skills. They also know that the programs put them on a path to upgrading they otherwise would not have, and it provides for portability of skills. The training does not deal with the literacy needed to work on any particular machine, which may be changed next month, but on how to work in a manufacturing environment. The upgrading also helps to create a level playing field for all the companies and thus to stabilize the problem of turnover. For these reasons,the unions and the workers themselves are viewed as indispensable participants in the program planning.

A testament to the success of the program are the remarks of Bud Holler, vice president of the UAW Local 1097, speaking for both AC Rochester and the union: "During the three years we've conducted workplace literacy programs at AC, we've lowered the cost of the product by 47%. In some areas of the plant we've been able to increase quality by over 800%, and they say most of that is due directly to the training. As a result AC Rochester has developed a capacity to attract contracts with foreign companies including Japan, Germany, Korea, and a major contract with the Soviet Union for selling catalytic converters and fuel injectors. That would not be possible without the quality poduct of the supplier chain."

Holyoke, Massachusetts. Hampden Papers, based in Holyoke, employs 185 people. The firm buys paper, paper boards, chemicals, metallic coil and plastic film, and converts them into paper products. None of these products are sold retail; they are supplied to other manufacturers who in turn use them as components in their own products. Hampden serves more than 50 different markets comprised of manufacturers who produce boxes, bags, luggage, game boards, book covers, match boxes, and an array of similar goods.

Mondays to Fridays, from noon to 5:00, twelve workers who are currently enrolled in a company learning program attend classes on the premises. Most attend on their own time, but three are released from their jobs for three hours a week. Those who go to class on their own time, whether before or after their shift, are paid their regular hourly wage by Hampden. The classes are geared to improving the basic education of the workers, but the study materials deal with the tasks they perform on their jobs. The work-oriented basic skills curriculum is flexible. It includes, as needed, English as a second language, adult basic education, and prepaation for the GED. Classes are taught by an instructor from the International Language Institute of Massachusetts, a private, nonprofit school. They are paid for jointly by the Massachusetts State Workplace Education Initiative and the company, with the latter now matching 100 percent of the state's funds with cash and in-kind contributions.

The program is about to enter its third year, with a total of 20 workers having participated so far. The results range from improved confidence to job promotions to three participants who are ready for or have passed the GED. There is on-going oversight by an advisory board comprised of representatives from the company, the union, the school, the area Private Industry Council, and the local Chamber of Commerce.

How did a small paper manufacturing plant in a small New England town find itself in the business of teaching basic skills?

"We're an old company, we've been here for 110 years," says Robert Fowler, president of Hampden Papers. "But now we're on a collision course between two conflicting trends. One is that in our shop the requirements for reading, writing, and handling basic arithmetic are increasing. There used to be a time when we had people working here who were functionally illiterate. We had plenty of jobs for them. But today we don't have jobs like that, not a single one. Our business has become much more sophisticated. We used to use a machine, for instance, that produced 1500 lineal feet of paper a day. At that rate, we could say to the operator, 'Push the green button in the morning, the red button in the afternoon, and call us if you need help.' But while we've been replacing the old machines with the new ones that produce more, the level of workers coming for jobs has declined dramatically. These machines are very complex, they've got control panels that look like NASA. They produce enormously more per man hour, but they also require a great deal more from the machine operator per man hour. At one time, if the man did it wrong the penalty was that he spoiled two reams of paper. Now if he does it wrong he spoils enough paper to stretch the entire length of Massachusetts."

"We always assumed that basic literacy was society's job," says Mr. Fowler, "but given what we're faced with now, management has a clear choice. We can do nothing or do something and I don't think we can afford to do nothing."

Laying Foundations: A Nucleus To Build On

In addition to the pathbreaking models detailed above, there are other promising pockets of activity around the country that should help light the way. Much of it has been generated by new federal funding for workplace literacy demonstrations over the last two years, some of it going to support projects by or for small businesses. Also at the federal level, major new literacy legislation pending in Congress includes further provision for strategic projects in workplace literacy. Although it does not focus specifically on the special needs of small business – in fact no new legislation has this focus! – it is likely to be used in part for that if enacted.

On the policy development front, several national studies in process should help out. One such study is that being carried out for the Small Business Administration by Berkeley Planning Associates, a California-based group experienced in labor market research for federal and state government. Berkeley is presently studying some 25 workplace programs focused on small businesses, and by the end of this year or early next year hopes to put out a report containing "how-to" information for small businesses and education provider groups.

Another study being carried out for Congress by the Office of Technology Assessment gives considerable attention to small businesses, and its final report will eventually be available publicly, possibly late this year. The work of The 70001 Institute for the Department of Labor is a further example and it will go well beyond research into actually developing prototype models. And the Southport Institute for Policy Analysis, which produced the *JUMP START* report, is planning to undertake an 18-month study of how and why companies invest in workforce basic skills as a basis for developing public and private policy options to encourage companies to invest substantially more. The project, to be carried out in partnership with the National Federation of Independent Business Foundation, is to include case studies of corporate decision-making in some 60 small to medium-sized firms in several states.

Of equal value in this vein are projects, one new and one nearing completion, addressed to the following two substantive problems:

The importance of designing workplace programs and assessing learning in terms of "functional

(Cont'd on p.8)

SMALL BUSINESSES

(Cont'd from p. 7)

context" is well established by research. Traditional academic and school-based approaches are generally not suitable. But functional context education is a new concept for most literacy and education professionals, indeed for businesses large and small, and few of them have the know-how to apply it. To help overcome this obstacle, the National Alliance of Business (NAB) is presently organizing a national advisory panel for a long-term effort to devise a national strategy to help large and small companies conduct functional context literacy programs as part of their job performance improvement efforts. A chief thrust of the effort will be to develop curriculum that can be used eventually to teach large numbers of adult and vocational education personnel and community college people how to develop functional context skills programs and train trainers for small businesses. Simon & Schuster Workplace Resources will publish the guides and curriculum produced in the project. In a sense NAB will itself be learning as the project moves along, for as Brenda Bell, a senior program official there, puts it: "The tools, language, and processes needed on the job are not yet adequately studied."

Another problem we face in developing programs for all of business and industry is that we don't know with enough precision just what kinds of skills are needed for specific entry-level jobs. The Educational Testing Service is two years into a three-year project to address this matter. It is examining occupational clusters around the country in industries projected by *Workforce 2000* to be the fastest growing. Judith Norbeck of ETS indicates that the point of the study is to learn exactly what skills workers in such industries will need to perform their jobs. The study is covering a range of job functions in five specific entry-level jobs that are common to several kinds of work environments – such as banking, insurance, manufacturing, health care, and government work. Its overall purpose is to lay the base for subsequent development of suitable testing instruments and instructional programs in both small and large work settings.

Two national associations have also embarked on projects that should benefit small businesses and help advance national thinking about them. After a year-long development period, the National Association of Printers and Lithographers is about to release an industry-wide basic skills curriculum for its membership of largely small businesses (see Corporate Literacy Action, p. 14). In the banking industry, many members of the American Bankers Association are small businesses and should benefit from the industry-wide basic skills program already being marketed by Simon & Schuster Workplace Resources (see Tools Of The Trade, item 27, p. 12). The design experts behind these efforts are Cox Educational Services based in Dallas and Performance Plus Literacy Consultants of Springfield, Virginia, and both are engaged in designing programs for other small businesses as well. Moreover, the banking and graphic arts efforts are examples of wholesale approaches and are significant as such. They are also significant because they are based on national surveys of need and built around functional tasks that at-risk workers actually encounter on their jobs.

At the state level – in Massachusetts, New York, Illinois, the Carolinas, Alabama, Virginia, Mississippi, and elsewhere – a variety of initiatives are also under development, usually with the strong involvement of governors' offices, and often under the leadership of unions.

In Alabama, for instance, large and small businesses are networking with each other, with support from state agencies. The state's Small Business Development Office learned that several factory representatives were looking for small manufacturers to supply products to their large industry customers. Interested in helping small minority businesses, they linked the two, with basic skills training coordinated by the state office and delivered through the community college system.

The Massachusetts Workplace Literacy Initiative, which is part of a comprehensive statewide literacy plan, is developing special curricula around the statistical process control systems being adopted by many manufacturers in the state. About half of the companies participating in the effort are small businesses. In a separate effort, the Continuing Education Institute in the Boston region, using federal workplace funds, has recently developed curricula to meet the specific needs of several small nursing facilities in the area. The program may well have relevance to the nursing home industry in general.

In New York, the State Education Department is entering into contracts with local unions, or unions in consortium with education agencies, to conduct workplace programs, a number of which involve small businesses.

* * *

It bears repeating that the problems faced by Hampden Papers in Holyoke and by the Rochester community are but mini-versions of the conflicting trends that pose a threat not only to small businesses but to the well-being of the nation. In this regard, all of the activities just touched on are important for they represent a nucleus on which to build. But they are also very new and represent only a modest beginning given the scale and complexity of the problem. The fact is that very little is yet known about what they add up to or how the collective experience can be used to map an overall national course.

It won't be easy for small businesses or the nation to meet the challenge. There are huge logistical problems to be sorted out, major substantive issues to be tackled, attitudinal and awareness obstacles to be overcome, profound research and policy gaps to be filled, and a myriad of other barriers to break down and move past. Moreover, we still have large unanswered questions about adult learning itself – this is not just a small business issue – and about the new rules of a global economy which seem to change almost daily.

Some Final Issues

Spreading The Word. To overcome lack of small business awareness and involvement, aggressive and innovative "marketing" may well be needed. State economic development offices, chambers of commerce, private industry councils, and, most importantly, national trade associations must, as most analysts see it, play a central role in such an effort. With a few notable exceptions, most of these entities are presently doing very little. There are more than 6,000 national trade and professional associations in the U.S. with state and local chapters numbering in the tens of thousands. The SBA itself has over 600 small business development centers around the country to provide technical and counseling help to small businesses, most of them housed in academic institutions. But by their nature organizations such as these tend to lag in awareness themselves. Similarly, colleges, and especially community colleges, have been slow to understand and move into this arena, and in terms of potential they are thought by many to be the single most important component of the provider system because of their community orientation and/or intellectual base.

State Policy. While there is no substitute for federal policy leadership, the primary burden for setting clear and useful policy goals rests with the states. To date only a handful of states have undertaken comprehensive long-range literacy planning in the larger context of human resource and economic development. Mechanisms need to be developed, for example, to bring employers together and aggregate demands for different kinds of training. Particular industries or sectors of the economy need to be targeted in terms of their particular employment and competitive needs. And careful attention needs to be given to the use of discretionary funding so that it isn't always public providers or trade associations or industry groups receiving the support, but the group or combination of groups that can best deal with the problem, however the problem is identified.

Federal Policy. A number of persons interviewed for this article pointed to lack of a national employment policy as a major obstacle to moving forward in a clear, systematic way. The nation has not decided on a direction, they say, doesn't have a set of clear goals, no real system in place to retrain and upgrade, especially in the workplace, and, no policy relating specifically to small businesses. We do have a policy and system for moving unemployed people into jobs (through JTPA and the JOBS program, for example), but none yet for the under-employed functionally illiterate adult. Fortunately, Congress and the Department of Labor are more and more aware of this problem, spurred on by the increasingly global nature of economic competition.

The Financial Environment. No one any longer doubts that it will take a major long-term investment to address the nation's workplace and workforce problems. And it is increasingly clear that the size and nature of that investment will require the active involvement of business as well as government. Yet, while there is a trend toward employer-based skills training, it is still common among most businesses to treat worker skills upgrading as a public responsibility. Moreover, the nation's businesses are accustomed to investing for the short-term, to turn a quarterly profit, rather than investing for the longer-term future, and this mind-set works against their support for workplace literacy on a scale commensurate with the need. This is a serious problem for the nation and one in need of strong government attention.

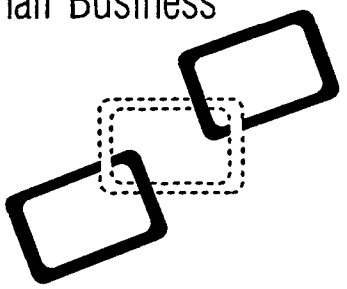
The Need For Information. Finally, the main frustration in preparing this article, a frustration voiced by nearly everyone BCEL consulted, is that there is insufficient data collection on small businesses at the national level. Not only is much of the data thin – and virtually silent on the question of small business worker education below high-school proficiency level – but it is often conflicting, making comparisons difficult. There is a serious need for more information on the characteristics of workers in small firms as contrasted to large. Data are gathered at the present time by a patchwork of government agencies, often on an ad hoc basis. ■

BCEL BUSINESS COUNCIL FOR EFFECTIVE LITERACY

ADULT LITERACY: PROGRAMS • PLANNING • ISSUES Newsletter For The Business & Literacy Communities

NO. 32 JULY 1992

THE MISSING LINK: Workplace Education in Small Business



A recently-released report by Forrest Chisman and the Southport Institute for Policy Analysis (SIPA) throws major light on the state of workforce literacy in America's small businesses—a subject that until now has received little focussed attention. The report, called The Missing Link: Workplace Education In Small Business,* summarizes a two-year study by SIPA. It is the first comprehensive, systematic inquiry into what small businesses are doing and not doing to upgrade their workers' basic skills and the factors and barriers that account for their action or inaction in this area.

How and why do small businesses invest in basic skills instruction for their workers? What are their characteristics? What are they getting from that investment? How many are offering such programs? Are there significant differences between firms that offer employee basic skills upgrading and those that do not? What reasons do small business firms give for not implementing a program? What connections exist between work reorganization in this sector and the provision of basic skills instruction? What policies would be most effective in helping small businesses on a large scale to implement the employee basic skills programs they need (*more than 10 million small business employees have basic skills problems that impair their performance on the job*), and what forces make this a national priority? These are among the questions at the heart of SIPA's inquiry.

The study is important because small businesses are the backbone of the nation's economic enterprise. Together they represent 99% of all U.S. businesses, employ 57% of the workforce, and generate 47% of the gross national product. They also generate two out of every three new jobs. They are, then, crucial to the nation's overall productivity, its competitive stance in world markets, and ultimately, its traditional standard of living.

Every major study of the past few years has found a hot connection between the ability of U.S. business to hold its own in the global marketplace and the need for skills upgrading in the workforce. But it is also coming to be understood that skills upgrading by itself will not be enough, that to achieve real results worker education will have to be accompanied by the reorganization of work into high performance systems. This is true, says The Missing Link, for small businesses as well as large.

A central concern underlying the study was that, given the current high interest of national and state leaders in improving workforce basic skills, there is no way to know if ideas for new public and private initiatives to advance this goal "would benefit small firms and their employees, or be off target, wasteful, and possibly filled with perverse effects." SIPA's bottom-line purpose is thus to provide information and analysis that will give policymakers at all levels of society a better understanding of small business needs and operating realities, and to offer recommendations for productive action.

The Research Approach

One phase of the study consisted of four surveys. Included were a national mail and telephone survey of a random sampling of 11,000 small and medium-sized firms, a more targeted mail survey of 4,317 members of the National Association of Manufacturers, and a separate telephone survey of 775 small firms. A fourth survey queried 1,535 members of the American Association of Community and Junior Colleges (AACJC) to learn about the "supply side" of employer-sponsored basic skills instruction.

A second component of the study consisted of case studies of 72 small and medium-sized firms in five states.** The U.S. Small Business Administration defines a small business as having 500 or fewer employees. For purposes of its study, SIPA broke this universe into two groups: very small firms having 50 or fewer employees and medium-sized firms having any number of employees greater than 50 up to 500.

Some Key Findings

• *At present, 3-5% of small firms have workplace education programs in operation.* In numbers, this ranges from 15,000 to 25,000 programs. These programs serve some 200,000 to 300,000 people in some way each year. This is about equivalent to the number of adults being served by the education components of major federal education/training programs.

• *The number of new small business program starts has increased dramatically in the last three years.* Workplace literacy programs are commonly thought to exist almost entirely in big business settings—the IBM's, XEROX's, and other industry giants. But a growing number of small firms have decided that investing in the basic skills of their workers pays, and many have been operating workplace education programs for some time. A few firms report programs dating back to the1960s or earlier.

• *Manufacturing firms have taken the lead in introducing workplace education programs in the past three years*—although non-manufacturing(service) firms account for the majority of existing worker skills upgrading programs. Moreover, manufacturing firms are more likely than other firms to have initiated the education programs, and on average they make larger investments in them.

• *Manufacturers are also in the lead in initiating some form of work reorganization during the past three years* (51%-77% of manufacturing firms as contrasted to 34-51% of service firms).

• *Medium-sized firms are much more likely to have workplace education programs than very small businesses.* Moreover, their programs tend to be more substantial in that they last longer, provide instruction in a wider range of skills, meet more frequently,

* The Missing Link was released together with a related background paper by Laurie Bassi, Smart Workers, Smart Work, which contains the project's research details and findings. The reports are available separately from the Southport Institute.

** Two-thirds of the case-study firms provide basic skills instruction to their employees; four were profiled by SIPA earlier this publication called Ahead Of The Curve.

and are likely to be led by trained teachers working from customized curricula.

- *Community colleges are the education partners of choice for most small companies, and indeed they are their most common partners.*

- *The vast majority of programs are taught at the worksite.* More often than not participation is voluntary, with partial released time given to workers. The most frequent pattern is a 50-50 donation of time by employer and employee.

- *Contrary to expectation, the issue of released time is not a major barrier to the establishment of workplace education programs.* This is true even though in most cases a shared-time arrangement results in a longer day for the employee.

- *Worries about higher employee turnover as a result of improved education is not the major disincentive to providing workplace literacy programs that has commonly been thought*, even though to some extent whatever is learned is "portable." In fact, small businesses with education programs report lower turnover rates than those without.

Types Of Programs & Subjects Taught

Small business programs being provided tend to be of three types:

Low Intensity Programs. These involve the least effort on the part of the companies and the instructional providers, and they are the least complex. Typically, they have individual tutoring arrangements worked out by the employer with an outside group. They are given both on site and off. The curriculum is mainly generic rather than job-related, though it may occasionally include GED preparation. It is directed to very low-skilled employees.

Quick-Fix Programs. These are of short duration, undertaken to solve an acute skills problem identified by the company, for example in math or ESL. They are often conducted in manufacturing firms that are implementing Statistical Process Control (SPC) when it is discovered that workers cannot do the simple fractions, decimals, measurements, and graph reading that SPC requires. Service sector firms that sponsor quick-fix programs—short ESL courses, for example— do so not with the goal of helping workers to become completely fluent, but to make basic on-the-job communication possible.

Lifelong Learning. Of high complexity and long duration, these are the most celebrated and least common kind of workplace education program. (They occur in less than one percent of the firms.) They provide workers with the opportunity to improve multiple skills and to continue their education as long as they wish. *They are almost always job-related in some way, built around the literacy requirements of current and future jobs.* Few employers set out to create lifelong learning programs, but have usually backed into them by a gradual expansion of more limited efforts.

Across the board, the skills most commonly taught are techniques of problem identification and problem solving, and interpersonal (team building) communications. Manufacturing firms are much more likely than service firms to teach GED and academic skills, with math at the top of the list. In general, reading and writing are next, with ESL less frequently taught (except in areas of the country with large immigrant populations and in service industries that rely heavily on such people—e.g. [illegible], health service, construction).

Many programs also teach general skills needed to get along in everyday life, sometimes because it is requested by the workers and employers want to sustain their interest. It is notable that in programs that require workers to donate their own time for participation in class, the workers' personal needs are more likely to influence the content, nature, and purpose of instruction.

Why Employers Who Offer Programs Do It

Competition. Firms that launch education programs report that they are under competitive pressure, especially international competition, and face demands from customers to improve their performance. (Many are suppliers to large business enterprises.) At the same time, they report that a large percentage of their hourly workers have basic skills problems that affect their performance on the job.

Many of these firms value the experience of their older workers and think that new hires are unlikely to be more skilled. They also tend to think their firms are unique and thus prefer to train their workers in their own way of doing things. Moreover, many have a tradition of loyalty to their employees which plays an important role in their decision to implement a basic skills upgrading program.

Quality. Though many firms are faced with both competitive pressures and poorly skilled workers, they still do not invest in workplace education, or they do so only minimally. The major difference between those that offer programs and those that do not is the emphasis placed on quality of production and service. "Workplace education in small firms is part and parcel of the quality movement in American business," says Chisman. Companies that mount education programs usually are those that have decided they must compete by improving the quality of their operations on a continuing basis. Typically, this involves introducing better technology and new forms of work organization. While it is possible to do this with only minimal attention to workforce skills, these companies believe that for a higher quality (performance) workplace to function well, a higher quality workforce is essential. Thus, their education programs tend to include both job-specific training and general education.

Enlightened Human Resource Policies. Those firms where workplace education is most likely to take root are in general more forward looking and more enlightened in their human resource development policies. Their corporate culture is frequently described as "worker centered." These firms provide higher wages, more benefits, greater opportunities for advancement, and more training of every sort than other companies of their size. They believe that a key to improving the quality of their operations is to develop flexible workers who can adapt to change. They may therefore offer cross training in a number of jobs so that employees can take greater responsibility, function better in teams, trouble shoot, and contribute ideas that will help the firm work better overall.

Committed Managers Are Essential

The success of small business workplace literacy programs depends more than anything else, says the study, on a strong commitment by senior managers to make them work. The evidence indicates that in the best programs, senior managers devote major time and resources to implementing the program. They also devote time to getting their workers to see that their future and jobs depend on the well-being of the company as a whole. It is worthy of note that firms providing programs don't necessarily have a more serious basic skills problem than those that don't offer programs. They simply care about the problem more, consider poor basic skills to be a very serious problem, and believe they must assume responsibility for solving it.

Workplace Education Pays

One of the study's main findings is that *employee skills upgrading programs have a handsome pay-off in both improved worker performance and bottom line gains.* The firms that invest in education programs are gaining far more benefits from new technology and the reorganization of work than firms that have introduced quality programs but do not provide basic skills education. Where the two operate in tandem, it has resulted in improvements in productivity, customer satisfaction, delivery time, scrap and error rates, and worker morale.

Other highly-valued gains were found as well. Both employers and workers report significant improvements in employee motivation, self esteem, willingness to take responsibility, ability to perform well in teams, and communication and problem solving.

Costs & Financing

Firms offering workplace education programs report a wide range of costs, with the median falling between $5,000 to $10,000. At the high end, case study research indicates that lifelong learning programs in firms with 100-300 employees cost the firms $30,000 to $40,000. But because these programs are generally subsidized in roughly equal amount by outside education partners (usually community colleges), the full cost is probably somewhere in the range of $60,000 to $80,000, excluding the value of the company's management time and employee released time, for which there are no reliable estimates.

Obviously these cost ranges simply tell what many firms presently pay for workplace education programs with which they are satisfied. Precise costs are in fact very hard to pinpoint. For one thing, no two programs are alike. Variables that influence cost include the length of time a program operates, the number of subjects taught, how many workers participate, the amount of released time given, the extent to which the program is customized, and so on. For another, firms do not compute their costs on a uniform basis. Some may consider only out-of-pocket costs, while others include management time and/or employee released time. And further, small companies do not and probably could not measure costs with any precision because their actual cash outlay is minimal and the other cost variables are so difficult to quantify.

The important point is that for the majority of firms *cost is not the supposed high barrier to introducing workplace education programs that has been supposed*, though this depends to some extent on the size of the firm. The study finds that medium-sized firms (over 50 employees) can usually afford almost any form of workplace education. They employ about one-third of the American workforce and are the companies most likely to report programs. For smaller firms, those with fewer than 50 employees, costs are more likely to be an issue.

To costs that could be measured, companies and education providers contribute about equally.

MISSING LINK

(Cont'd from p. 7)

Typically, the employers pay for staff planning and implementation, employee released time, and the costs of instruction. Education provider groups generally assume the overhead and technical assistance costs involved in helping firms diagnose their needs and develop customized programs. But, in fact, the study reveals, small business programs are heavily subsidized by the publicly-supported adult education institutions with which they work because these groups provide their services at marginal cost so that small companies can afford it.

The Challenge: Overcoming The Barriers

That the small business workplace literacy movement has come as far as it has with so little initiative and support from outside sources is seen by SIPA as extraordinary. It also testifies to how serious the need is. For despite the outstanding success of programs in companies that have implemented them well, only 3-5% of small firms have mounted any program, and only 1-2% have programs that are extensive. Even though this translates into service for 200,000 to 300,000 people each year, 10 million workers need to be reached. Consider the potential.

On the demand side of the equation, the study found that as many as 20-30% of medium-sized firms would like to have programs because of a perceived basic skills problem. Moreover, many that are presently investing in programs say they would like to expand and improve their efforts. At the same time, a very large percent of all employers indicate that they are moving toward work reorganization, including the shifting of greater responsibility to workers. Even though they may not now wish or intend to launch a basic skills upgrading program, they seem to understand that they will need a more highly-skilled workforce.

On the supply side, most community colleges (the education partners of choice) and other provider groups say they would like to extend their services to more companies.

In short, the number of firms engaging in workplace basic skills upgrading could and should be many times as great as it is now. The number of workers who would benefit from these programs should rise into the millions. The service providers would like to accommodate them. The question is: If costs, high turnover, and other presumed obstacles do not stand as major impediments, what does?

To begin with, half the companies not offering skills upgrading programs say that they don't need to. But they nevertheless report employee basic skills problems to the same degree as firms that have programs. So clearly there are other factors at play.

One major barrier, according to the firms themselves, is that *they don't have enough information to know whether a program would be valuable.* They are generally aware of the national basic skills problem, but they know very little about its specific nature or how it relates to their own firms. They know very little either about model workplace education programs being offered elsewhere or the gains they produce.

An equally important barrier is that *the majority of small businesses don't know where to turn for help.* They themselves don't have the know-how, time, or staff to assess their needs and design suitable services. But even if they did, finding an outside group to work with them—on assessment, program design, and program operation—is time consuming at best and an ad hoc activity that often results in false starts and disillusionment.

Few outside provider groups have the understanding and expertise to develop effective workplace education programs. Their staff are new to this area of adult education. They have had little training in how to do a first rate job of helping firms understand their needs, develop customized programs, and establish a good working partnership. Too often, they try to sell employers a standard, prepackaged curriculum which is unsuited to their needs. Like small businesses, many are learning by trial and error. *The need for a systematic approach to staff development in this field is urgent.*

As things now stand, the national effort can be characterized as a cottage industry of ad hoc public-private partnerships, within which are many successful and workable models. Workplace literacy, as SIPA sees it, is a major growth area. *The immediate challenge, as a national priority and economic imperative, is to extend those models to the hundreds of thousands of firms that want to give workplace education a try and to develop policies and programs that will begin to break down the informational and technical assistance barriers reported by small businesses across the board.*

At present, there is a missing link between the need and demand for workplace literacy programs for small business employees and the capacity of outside organizations to help fill the demand, and to fill it effectively. Yet because small businesses, by their very nature, must rely heavily on outside groups to implement programs, SIPA concludes that *the aim of public and private policy and action should be to stimulate and build upon the public-private partnerships that are at the heart of the small business approach.* This means that major attention must be given to the "supply side" of the equation.

The effort of educators to provide workplace education, like the interest of small business employers, is fledgling. Most programs are only a few years old, and many colleges have only recently begun to offer services. The number of companies they serve is small, less than 20 at any given time. (The number of firms served each year per state by all providers is 200-300 on average.) In short, quite apart from the staff development need, their ability to supply services is unable to keep pace with demand. *The major barrier keeping colleges from expanding their efforts is inadequate funding and personnel.*

Employers usually pay a fee for college services, except in some states such as North Carolina where state policy requires the service to be provided free. However, as noted earlier, they rarely pay the full cost, and the colleges must fund the balance from bits and pieces of funding intended for other purposes. Because workplace education is a relatively new service, it is often a marginal part of community college life. State policy does not define it as a major community college mission, and college administrators rarely give it high priority.

Tight funding is one of the reasons colleges do not market their services aggressively, says the study. They tend instead to wait for companies to come to them. One consequence is that they rarely serve the very small firms, partly because those firms are short of time and resources. Yet very small businesses employ almost as many people as medium-sized companies. Moreover, case study evidence reveals that firms with as few as 35 employees can support excellent programs if they receive the assistance they need.

To Forge The Missing Link

To overcome the problems and barriers, SIPA calls for new initiatives at the local, state, and national levels, with fairly well defined responsibilities for each player, especially the federal government:

Trade Associations & Unions. Small businesses say they prefer their trade associations to demystify basic skills and point them toward the right form of hands-on assistance. They want that help to come from state and local groups, not the federal government whose programs they view as out of touch with their needs. For its part, organized labor has been very active in the basic skills efforts of large companies. Most small firms are not unionized, but where they are, unions could play a key role in promoting new programs.

The States. The supply of workplace literacy programs is strongly influenced, according to SIPA, by state policies. Among many priority steps the states should take are these: Make funds available specifically for literacy programs for small businesses. Remove limits on the amount of contract work that community colleges and others can undertake. Dedicate employer fees to a workplace education revolving fund rather than, as at present, to the general state fund for educational institutions. Develop a system of quality control for workplace education, including centers of information, expertise, and oversight. Make grants to help stimulate employer interest. Form consortia of very small businesses whose employees can be collectively served. At the local level, develop points of contact visible to the business community.

Some states have already begun to take such measures. Indeed, the experience of Massachusetts, South Carolina, and Virginia, in particular, suggests a model for structuring support for workplace education. The foundation is local. It employs a statewide system of workforce specialists who, for logistical purposes, are housed in the local education institutions that provide the services. Their function is to serve as a broker between local supply and demand and between local and state-level groups, to promote workplace education to employers and suppliers, and to be a visible point of contact and expertise for both. These specialists are a source of one-stop shopping for the companies, and for suppliers they are a source of expertise and clients. Simply put, the state's role is two-fold: to provide a state office dedicated to workplace education, which provides and supports local specialists through funding and technical assistance; and to enact policy measures that will enhance funding and remove barriers.

The Federal Role. SIPA points out that the federal government is now providing an estimated $74 million to $125 million for workplace education in small businesses through its support of the public institutions that provide the services. "This is a pittance," the report states, "compared to other federal programs aimed at major economic and education problems. And, by all indications, it is money very well spent."

But this federal involvement is haphazard and inadvertent. Much of the funding comes from programs designed for other purposes. Nothing exists for small business workplace education as its expressed purpose (although the Department of

Education's workplace literacy grants program provides some funding for small business initiatives). The result is instability of support, but also lack of guidelines to determine whether federal monies are being used well. More importantly, there is no federal plan. No one is responsible for seeing to this area of need, for targeting investments on the highest priorities, for promoting the cause, for tracking the use of federal funds, or for sponsoring research and information dissemination that would be helpful to small businesses and local provider groups.

What is missing is a center of gravity, a solid core responsible for all these issues. And providing that core on a national basis is something that only the federal government can do. What is needed is an effective model for federal involvement. Fortunately there is one at hand.

The Cooperative Extension Model

The Cooperative Extension Service of the U.S. Department of Agriculture, in operation since 1914, is one of the most successful federal programs ever implemented. It has been a major force in achieving the revolution in American farming that has made agriculture our highest productivity industry.

The Service is based on a network of local county agents who serve as sources of information and technical assistance for individual farmers, as brokers between farmers and other institutions such as state universities, that can help them, and as advocates for a new style of farming. Their primary mission in the early days was to use the demonstration method to help farmers try out new ideas on their own land. The agents are supported by centers of knowledge at universities, the Department of Agriculture, and elsewhere. Funding comes from federal matching grants to the states. Training, information, back-up, and oversight comes from the Department.

The analogies are self-evident. The model would solve the central problems holding back development of basic skills instruction in small firms. It would supply the missing link between supply and demand at the local level, provide a stable stream of funding for technical assistance and outreach, and create a method by which to monitor and improve quality.

Such a system transplanted to workplace literacy education need not be expensive, the report indicates. It would be structured on a program of federal matching grants to states, administered by a federal office of workplace education. The grants would be for two purposes: to establish state-level offices of workplace education and provide support for a national network of workforce specialists.

With states matching at a level of 15%, a federal authorization of about $120 million a year would cover the costs—a bargain basement price that is less costly than any other major federal education and training effort in existence today.

(A full copy of The Missing Link is available from SIPA for $17.95. Smart Workers, Smart Work and Ahead Of The Curve, two related publications, are available for $17.95 and $25.00 respectively. All three publications are available as a package for $40.00. Send prepaid orders to the Southport Institute for Policy Analysis, Suite 460, 820 First Street NE, Washington, DC 20002.) ■