Basic Skills in the Hotel & Food Service Industries. Workforce & Workplace Literacy Series. Revised.

Business Council for Effective Literacy, New York, NY.

Jun 93

10p.; Revises ED 344 077.

Reference Materials - Directories/Catalogs (132) -- Collected Works - Serials (022)

BCEL Brief; n3 Jun 1993

MF01/PC01 Plus Postage.

Adult Basic Education; *Adult Literacy; Citations (References); Education Work Relationship; *Food Service; *Hospitality Occupations; Instructional Materials; Labor Force Development; *Literacy Education; Program Administration; Program Development; Resources

*Workplace Literacy

This report contains a list of 21 contacts and 9 references concerned with workplace literacy programs in the hotel and food service industries. 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 the hotel and food service industries, and training manuals for conducting such programs. The report also contains a summary of the state of basic skills training in the hotel and food service industries today. Attached is a reprint of the BCEL newsletter for July 1988, containing an article, "Guiding Lights: Policy and Planning," which summarizes the "Workforce 2000" and "Toward a More Perfect Union" reports and their implications for policymakers. (KC)
According to the Hudson Institute's Workforce 2000: "In absolute numbers the biggest job categories to be created [in the coming years in the U.S.] will be service occupations, administrative support, and marketing and sales, which together will account for half of the net new jobs. In the service category, the largest group of workers will be cooks, nursing aides, waiters, and janitors." (See attached summary.) Thus, the U.S. workplace will need more qualified cooks, waiters, and other food service personnel, as well as custodial workers. These job categories are already major segments of the hotel and restaurant workforce.

To be competitive, hotels and restaurants that hire food service and other kinds of workers are putting increased emphasis on "quality." Quality service in these industries will in turn require the ability to operate computerized record-keeping equipment, use cookbooks to prepare previously-exotic meals, and perform other tasks never before seen in the industry.

Many of the food service and custodial jobs in the hospitality industry tend to attract low-skilled, entry-level workers who have limited formal education. In some states, limited English proficient immigrants make up the majority of hospitality workers. Many of these employees will require the upgrading of their basic skills, including their communications skills, in order to handle the industry's emerging demands for quality and new technologies.

To date there have been no industrywide workplace education initiatives by trade associations or unions representing the hotel and food service industries, as there have been in banking, printing, and construction.

Contacts

The following people/organizations are operating general or job-specific employee basic skills programs for hotel and food service employees, providing significant technical assistance in the development of such programs, or operating grant programs in support of workplace projects in the industry.

1. **Anne Lomperis, Language Training Designs (LTD), 5006 White Flint Drive, Kensington, MD 20895-1035, (301) 929-8540.** Lomperis is a specialist in corporate language training programs with wide international experience who has worked broadly in the U.S. with the hotel and food service industry. She established LTD in April 1989. The company focuses on training literacy providers and helping businesses learn how to determine their own literacy needs and select vendors who will provide them with quality programs to meet these needs.

2. **Virginia Rebata, Director, Human Resources, Field Programs & Services, Marriott Corporation, Marriott Management Services, Dept. 819.86, Washington, DC 20058, (301) 380-8765.** In partnership with Montgomery Community College and the...
American Association of Community Colleges, Marriott has completed a pilot job-related literacy program—At Your Service—at its headquarters in Bethesda, Maryland. The functional context curriculum for the pilot targeted food services and facilities management jobs. As part of a corporate strategy Rebata developed for dealing with the employee basic skills issue, the program was designed for easy replication at other worksites, and the company is now distributing information about it to all Marriott managers. Rebata was formerly with the National Alliance of Business with responsibility for workplace and workforce literacy.

3. Lennox McLendon, Principal Program Specialist, Office of Adult Education, Virginia Department of Education, P.O. Box 2120, Richmond, VA 23216, (804) 225-2075; and Mark Embleidge, Executive Director, Virginia Literacy Foundation, P.O. Box 1125, Richmond, VA 23208, (804) 225-8777. The Office of Adult Education (which focuses on the public sector) and the Foundation (focusing on the private sector) share statewide responsibility for developing general and workforce literacy in Virginia. They are involved in a number of workplace projects in the hotel and food service industries.

4. Inaam Mansoor, Director, Arlington Education and Employment Program (REEP), Wilson School, 1601 Wilson Boulevard, Arlington, VA 22209, (703) 358-4200. In partnership with the Chambers of Commerce in Arlington and Alexandria, Virginia, REEP works with over a dozen local hotels—including Embassy Suites, Holiday Inn, Hyatt, Quality Hotel, Guest Quarters, Ramada Inn, Arlington Renaissance Hotel, and several Marriott hotels—to operate job-related employee ESL programs. These programs, as well as one with 7-Eleven Stores, have led to the development of three customized curricular programs (see References).

5. Claudia Riedl, Director of Staff Development, Boca Raton Resort and Club, P.O. Box 5025, Boca Raton, FL 33431-0825, (407) 395-3000, ext. 1178. Riedl operates an ESL program for a large number of the Resort's immigrant employees. The curriculum focuses on job-related tasks, intercultural issues, and personal development.

6. Tony Lagos, Adult Education, Orange County Public Schools, 445 West Amelia Street, ELC 8, Orlando, FL 32801, (407) 849-3200, ext. 2839, or: (407) 849-3286. Thirty-five Orlando-area hotels operate on-site ESL classes for immigrant employees in collaboration with the ABE program of the Orange County Public Schools. OCPS has developed a generic curriculum related to the hospitality industry. The program instructors—who come from the area's four vo-tech centers—customize the curriculum to meet the training priorities of each employer. They also use the business forms and instruction manuals of the particular hotel in which classes are held. Instructors identify and are sensitive to the cross-cultural needs of the employees in their training classes.

6. Miriam Burt, Director, Skills Enhancement Training Program, Food & Beverage Workers Union, Local 32 & Employers Benefit Fund, 1221 Massachusetts Avenue NW, Washington, DC 20005, (202) 393-3232. The Employers Benefit Fund and the Human Resources Development Institute, the training arm of the AFL-CIO, developed a functional context basic skills program for cafeteria workers in the Washington, D.C. area. The curriculum was initially comprised of job-related reading, writing, math, and communications skills, and was later expanded to include ESL and pre-GED.

7. Willie Blackwell, Literacy Coordinator, Dobbs International Services, Inc., 1669 Phoenix Parkway, Suite 204, College Park, GA 30349, (404) 991-4519. A Dial Corporation-owned food service company, Dobbs prepares airline meals and operates restaurants in U.S. airports. Dobbs began providing basic skills training to workers in its Atlanta airport facility in 1988. In 1991, the “Dobbs Caters to Learning” programs were extended to offices in Dallas, Charlotte, Memphis, Orlando, and Tampa; and the program was opened to families of employees. The company's goal is to expand the program to all of its 52 facilities by 1995.

8. Rebecca Morris, Executive Director, Literacy Volunteers of the Lowcountry, P.O. Box 21118, Hilton Head Island, SC 29925, (803) 681-6655. LV-Lowcountry operates literacy programs in several area hotels including Crystal Sands, Westin, Hyatt, Royal Golf and Tennis, and Sea Pines Plantation. The programs offer basic skills through the GED level and ESL. They incorporate job-related materi-
als whenever possible. More information can be found in two articles published in *Convene: The Journal of the Professional Convention Management Association*: “A Literacy Initiative” and “The ABCs of Launching a Literacy Program” (see References).

9. **Linda Hellman, Project Manager, Workplace Education Project, Pima County Adult Education, 5331 West Plata, Suite 600, Tucson, AZ 85705, (602) 884-8628.** A partnership effort of the Arizona Consortium for Education and Training, the Southern Arizona Innkeepers’ Association, and Tucson Manufacturers Chamber of Commerce, the Workplace Education Project offers job-related basic skills, problem solving, communications, GED, and ESL instruction to workers in a number of industries including hotels and resorts.

10. **Wayne Snelgrove, Director of Adult Literacy Services, West Georgia Tech, 303 Fort Drive, LaGrange, GA 30240, (706) 882-2518.** Callaway Gardens, a resort in Pine Mountain, Georgia, worked with West Georgia Tech to assess the need for a general basic skills program for its employees who come from surrounding rural communities. As a result, an on-site program has been set up that serves employees of Callaway Gardens and the general public. Callaway Gardens provides the facilities, and West Georgia Tech the instructor and materials.

11. **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. As detailed in its publication, *Workplace Literacy: Reshaping the American Workforce* (see References), about 8 percent of the grants were awarded to the hotel and hospitality industry. The current (FY93) level of funding for the Program is about $19 million.

12. **Paul Kiley, Community Organization Specialist, Library Development Services, California State Library, 1001 Sixth Street, Suite 300, Sacramento, CA 95814, (916) 324-7358.** Kiley is a source of information on workplace programs in the state, including those in the hotel and food service areas.

13. **Sue Berg, State Literacy Coordinator, Governor's Council for Literacy, Governor's Office of Children & Youth, P.O. Box 3044, Honolulu, HI 96802, (808) 586-0110.** The Governor’s Council for Literacy has been encouraging hotels and other businesses around the state to set up workplace literacy programs. The examples cited here are only a sampling of those that have been established or are under way: The Kaanapali Beach Hotel works with the Maui Hui Malama Literacy Program in Wailuku. Volunteers from the hotel staff and surrounding community are trained to be tutors for hotel employees desiring tutorial help. RockResorts and the international Longshoremen’s and Warehousemen’s Union in 1990 set up a basic skills program for workers on the island of Lanai. Participants are either making the transition from agricultural to tourist industry jobs or trying to qualify for better jobs in the pineapple industry. The Coco Palms Hotel in Kauai operates a job-linked basic skills program on company premises in which employees tutor fellow employees, using a curriculum which includes vocabulary and concepts encountered on the job. The Hilton Hawaiian Village Hotel in Honolulu has established workplace literacy and ESL Programs. (See also #14 below.)

14. **Leatrice Haas, Director, Waikiki Lifelong Learning Center Project, College of Education, University of Hawaii at Manoa, 1776 University Avenue, UA2 Room 7, Honolulu, HI 96844-0001, (808) 956-7834.** The Waikiki Lifelong Learning Center (WLIC) Project is an expansion of Project SUCCESS, which began in 1988 with seven ITT Sheraton Hotels for the purpose of providing their housekeeping, food service, and other entry-level staff with ESL instruction, high school diploma preparation, and basic skills. The new Center, begun in 1992 with funding from the National Workplace Literacy Program of the U.S. Department of Education, has five business partners: the original group of ITT Sheraton Hotels in Hawaii, Aston Hotels and Resorts, HTH Corporation, Otaka Inc., and Tropic Art Design. It is administered by the Department of Curriculum and Instruction at the University of Hawaii’s College of Education. The five business partners in WLIC constitute a total of 19 Waikiki hotels. The Center offers free workplace literacy instruction to all employees of the participating businesses to enhance their on-the-job skills and promotion opportunities, prepare them for U.S. citizenship and driver’s license tests, and
teach them resume writing and interview techniques. Programs include basic skills, vocational ESL, GED preparation, job-related oral communication skills, and basic computer literacy skills. Customized workplace literacy classes are available on the job or six days a week at the Center. All courses are open-entry, open-exit, and available at every skill level.

15. Donna Cooper, Executive Director, Mayor's Commission on Literacy, 1500 Walnut Street, 18th Floor, Philadelphia, PA 19102, (215) 875-6602. The Mayor's Commission has urged and worked with local employers to establish employee basic skills programs. Participants include the CIGNA Corporation, CorpStates Bank, the Philadelphia-based Works, the Southeastern Pennsylvania Transit Authority, the Greater Philadelphia Hotel Association, and other businesses.

16. Margaret Tarpley, Coordinator, Adult Education, Quapaw Vocational Technical School, 200 Mid-America Blvd., P.O. Box 3950, Hot Springs, AR 71914, (501) 767-4433. The School runs basic skills programs in a number of local companies, including the Park Hilton where employee classes are held in the executive dining room. Employees attend on their own time after work, but management pays for their books and supplies, and serves them a free dinner.

17. Hortensia Ramos, Director of Food Services, University of Illinois, URHLAR, Room 17, 1005 South Lincoln, Urbana, IL 61801, (217) 333-1407. For the past 12 years, the Food Services Department at the University has run a basic skills program for both native-born and immigrant employees. The effort has attracted national attention.

18. Joe Connolly, Coordinator, Labor-Management Workplace Education Program, University of Massachusetts, 416 Goodell Building, Amherst, MA 01003, (413) 545-READ. The Program is a partnership that includes the University of Massachusetts; the local American Federation of State, County, and Municipal Employees; the Employers' Association of Western Massachusetts; the Northampton Labor Council; and the University Staff Association (a university labor union). A variety of courses are offered to western Massachusetts employees including basic skills classes for food service workers. Approximately 500 employees have been served since 1987 when the program began, with some 150 of them working in the food industry.

19. Elizabeth Coley, Manager of Program Development, Arbor Incorporated, 1 West Third Street, Media, PA 19063, (215) 566-8700. Headquartered in Pennsylvania, Arbor runs training programs in 13 states for clientele from government-funded programs such as JOBS and JTPA. Arbor's training focuses primarily on interpersonal/generic skills needed by entry-level workers: communication skills, problem-solving skills in the workplace, good work ethics, and the ability to adapt to a multi-cultural working environment. Within the hotel/hospitality industry, Arbor has worked with Sheraton, Hyatt, Guest Quarters (see also #20 below) and others. Typically, the programs are held on-site at various hotels or at a "host" hotel before workers are hired. The hotels guarantee a certain number of job slots for those who successfully complete the course (90 percent do). The newly-hired employees with basic skills problems can then take advantage of on-site programs or are referred to community education groups. Arbor stresses that employers with whom they agree to work must be supportive and open to change.

20. Steven Fraser, National Director of Training, Guest Quarters Suite Hotels, 30 Rose Wharf, Boston, MA 02110, (617) 330-1440. As part of a pilot program in 1991 in which a number of Boston hotels participated, Fraser conducted specialized pre-employment training for people recruited from the welfare population. On completion of the course, trainees were hired for entry-level positions in the hotels. Nationwide, Guest Quarters now has in place on-site ESL and job-related skills programs for its employees.

21. 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. Food service groups are among its clients.
References

1. **Housekeeping ESL: Workplace Literacy Curriculum for Hotels (revised), Food and Beverage Industry ESL Workplace Literacy Curriculum for Hotels (revised), and Convenience Store Workplace Literacy Curriculum**, by Carol Van Duzer et al., are job-related curricula based on the Arlington Education and Employment Program’s work with local hotels and 7-Eleven stores. They will be available in Fall 1993 from the ERIC Document Reproduction Service, 7420 Fullerton Road, Suite 110, Springfield, VA 22153-2852, (800) 443-3742.

2. **Workplace Literacy: Reshaping the American Workforce** is a 1992 publication of the U.S. Department of Education. 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. (About 8 percent of the grants went to the hotel and hospitality industry.) 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. The publication is designed to disseminate information and help point the way for businesses/industries, labor organizations, and educational institutions that may recognize the need for upgrading workers’ skills but are unsure of how to proceed. Available free from the Clearinghouse of Adult Education and Literacy, U.S. Department of Education, 400 Maryland Avenue SW, Washington, DC 20202-7240, (202) 205-9996.

3. **Workforce Education Programs in Florida**, from the Florida Department of Education, is a county-by-county directory of Florida’s workforce education programs run by adult education providers as of 1991, including a number of programs in the hospitality industry. Each entry gives the names and addresses of the educational provider and the business contact along with information about the target group served, the nature of the program, and the role of the participating business/industry (recruiting, in-kind contributions, recognition, etc.) For a free copy contact John Lawrence, Division of Adult, Vocational, and Community Education, Department of Education, 325 West Gaines Street, Room 1244, Tallahassee, FL 32399, (904) 488-8201.

4. **Convene: The Journal of the Professional Convention Management Association** published an article entitled “A Literacy Initiative” (April 1992) that describes the programs that Literacy Volunteers of the Lowcountry operates in several hotels and a follow-up article, “The ABCs of Launching a Literacy Program” (December 1992), which contains guidance for others who want to start programs for hotel workers based on LV-Lowcountry’s experience. The back issues may be purchased for $5 each from the Professional Convention Management Association, 100 Vestavia Office Park, Suite 220, Birmingham, AL 35216, (205) 823-7262.

5. **Job Trails**, from Penn State’s Institute for the Study of Adult Literacy, is a computer-assisted basic skills assessment system that evaluates skills levels in food service and four other occupations (health, maintenance, clerical, and retail). Activities are coded according to the CASAS Workplace Literacy Analysis-Individual profile. The software was designed for use by adults entering job training or basic skills programs. It offers some skills instruction along with the assessment activities and a means for exploring career options. An Instructors’ and Tutors’ Guide offers suggestions for creating instructional materials and links areas of skill need to commercially-available curriculum materials. The program is available in both IBM and Macintosh formats. The complete program sells for $564; a preview set is available for $25. Orders should be prepaid or accompanied by a purchase order. Contact the Institute for the Study of Adult Literacy, 204 Calder Way, Suite 209, University Park, PA 16801-1756, (814) 863-3777.

6. **A Day in the Life...**, also designed by the Institute for the Study of Adult Literacy, is a computer program that teaches job-related basic skills in the context of the same five occupational groups as **Job Trails** (see #5 above), including food service. As in **Job Trails**, the skills are keyed to CASAS. The program, which is aimed at adults reading at the 5th to 8th grade level, helps prepare students for entry-level jobs by moving them through scenarios in which they perform true-to-life job tasks with basic skills lessons embedded in.
them. While performing the tasks, students have recourse to job manuals and other aids. When a task is completed, the student receives an evaluation from "management" and can take advantage of a personalized "training package." The program comes with an instructor's manual and contains "learner data disks" for use in tracking and recording student progress. The program is available in both IBM and Macintosh formats. For more information, prices, and demo disks, contact Curriculum Associates, Inc., 5 Esquire Road, North Billerica, MA 01862-2589, (800) 225-0248.

7. Literacy Problems Threaten Revenues (9/2/88); English Language Programs Are Worth the Investment (10/16/89); and If You Don't Have a Literacy Program Read This Now! (10/31/90), Restaurants & Institutions. This trade magazine for the food industry frequently covers workplace literacy issues. For copies of the articles cited contact Lorry Zirlinn, Restaurants & Institutions, 1350 East Touhy Avenue, Des Plaines, IL 60017-5080, (708) 390-2026.

8. Restaurant Business Magazine, 633 Third Avenue, 33rd floor, New York, NY 10017, (212) 984-2348. This magazine periodically investigates the issue of employee basic skills in the restaurant industry.

9. Workforce 2000: Work and Workers for the 21st Century (see attached BCEL Newsletter summary) was prepared by The Hudson Institute for the U.S. Department of Labor and published in June 1987. This groundbreaking report has already had a powerful impact on national understanding of the workforce and workplace illiteracy problem. It was the first serious and comprehensive effort to analyze current and future workforce literacy and education retraining in the context of national demographic, economic, and social trends. Among other things, it confirms that even though hotel and food service jobs will increase during the next decade or so the pool of available workers will significantly lack the basic skills required for those jobs. The full report is available for $4.25 from the Superintendent of Documents, U.S. Government Printing Office. P.O. Box 371954, Pittsburgh, PA 15250-7954. For phone orders using Visa or Mastercard call (202) 783-3238.
A number of reports have been published in the past few months with important implications for policymakers, employers, and literacy workers. Two of the most significant, Workforce 2000 and Toward A More Perfect Union, are the subject of this article.

These reports come at the problem of present and future basic skills needs from different perspectives but they are mutually reinforcing. They command attention because they represent new thinking at the highest levels and bring a new level of sophistication to notions about the problem. They speak to planners in the corporate world, in labor, education, and in government and social service agencies across the country.

**WORKFORCE 2000: Work And Workers For the 21st Century**

Workforce 2000 was commissioned by the U.S. Department of Labor from the Hudson Institute to help shape federal workplace policies and programs as the nation moves toward the next century. It is a rich source of information about jobs of the future and the increasingly higher levels of skills and education they will require. As such, it is the raw material of planning for those at every level who need to evaluate how they are positioned to meet what is coming. The report documents labor patterns and social trends that have been ongoing for decades. It serves notice that these trends are now converging and by the year 2000 will produce an America that is unrecognizable from one that existed only a few years ago.

Chief among the changes is the now familiar shift from manufacturing to service industries, which is already transforming the American economy and the experience of workers in fundamental ways. (Just ask any of the 11.5 million Americans who lost their jobs between 1979 and 1984, and the two million more who, according to various government agencies, are being laid off each year.) This shift, in tandem with others such as a workforce that is becoming older, more female, and more disadvantaged, and the trend toward jobs that will call for much higher skills, are among the forces creating a new social setting.

The new setting will render irrelevant the policies guiding today's economy and labor markets, which were designed in the 30s and 60s in response to the conditions of those decades — i.e. social security, welfare, unemployment insurance, trade adjustment assistance, and training programs, among others.

Take welfare. The present program was designed long before most women worked. Now that a majority of all women with young children work, it no longer seems cruel to require welfare mothers to do so. A new program therefore might well mandate work for all able-bodied welfare mothers except those with infants, backed up by training, day care, job counseling, and a job creation program.

Because long range forecasts are uncertain, Workforce 2000 provides alternative scenarios based on different rates of economic growth, but they have in common several key points about the U.S. economy and job market over the next 12 years and beyond.

(cont'd on page p. 6)
GUIDING LIGHTS (cont'd from p. 1)

The Economic Background. U.S. growth and world growth are tightly linked. The baseline or "surprise-free" scenario forecasts that the U.S. will grow at a rate of about 2.9 percent compared to 3.1 percent for the world as a whole. The developing nations at the threshold of industrialization will surge ahead.

Manufacturing and manufacturing jobs will decline as a share of the GNP. Where manufacturing produced some 30 percent of all goods and services in 1955, and 21 percent in 1985, its share will drop to less than 17 percent by the year 2000. Just as agriculture lost its central role in the American economy at the beginning of the century, so will manufacturing lose economic importance as the century draws to a close. The report cautions that "those who fail to recognize this inevitable trend-for example, states that try to capture new factories to boost their local economies-will be swimming upstream against a powerful tide..."

But the news isn't all bad. The downhill slide in manufacturing should not be interpreted as a decline in the American destiny, according to the report. On the contrary, it signifies an advancing stage of growth. Historically, economic development all over the world follows a predictable pattern in which agricultural production shifts to manufacturing and then to services. Indeed, the shift to services is a reliable barometer of the stage of economic development all over the world.

What's more, as the world economy prospers, so will ours. It will be in our own interest to help boost the economies of other countries and, as we do so, there will be new opportunities in our own future.

"The envy and anger that many in the U.S. feel toward Japan's success should not blind policymakers to the reality that as Japan (and every other nation of the world) grows richer, the U.S. will benefit-just as it is easier for a company to prosper in a rapidly growing market than to capture market share in a shrinking one...Most of the steps that must be taken to improve U.S. competitiveness have little to do with changing the behavior of the Japanese or Koreans."

As manufacturing shrinks, a major key to the well-being of the U.S. will be improvement of productivity in the service industries. But the report warns that a serious gap is emerging between the advancing skills required of the new service economy and the poor skills of new entrants into the labor force. "It has been observed," it states, "that in the competition between the U.S. and Japan, the world's best educated lower half of the workforce is beating the world's best educated upper half." One of the things we must must attend to, therefore, is substantial improvement in the education of large numbers of prospective workers. And this must, Workforce 2000 stresses, be assigned a high place on the nation's agenda.

Just what are the service industries? Which occupations in them will grow most rapidly? And who will be comprising the new workforce?

The Service Industries. In essence, the service industries are those which do not produce goods. They create economic value without creating a tangible product, though some may add value to manufactured or other products by making them more available, as in transportation or retailing.

The changing job mix. The above list indicates that many commonly-held assumptions are untrue-for example, that service industries are synonymous with "an information economy" or that service jobs are low quality jobs. The fact is that many of these services have nothing to do with information, and that many—medical care, finance, and transportation, for instance—are capital and technology intensive. They require extensive knowledge and training, and they pay premium wages.

Workforce 2000 forecasts that the job prospects that will quickly outstrip opportunities in other fields are the professional and technical, managerial, sales, and service jobs. The fastest growing fields? Lawyers, scientists, and health professionals. The disappearing ones? Not surprisingly, machine workers and assemblers, miners, and farmers. The table at the right shows the changing occupational structure in more detail (Workforce 2000, p. 97):

Rising Educational and Skill Requirements. The fastest growing jobs show a striking trend toward higher educational requirements. Between now and the year 2000, for the first time in history a majority of all new jobs will require some postsecondary education. The median years of schooling required will be 13.5 compared to 12.8 for present-day workers. Almost a third of all jobs will be filled by college graduates. Today, only 22 percent of all occupations require a college degree. Indeed, many professions will call for nearly a decade of study following high school. And even the least skilled jobs will require a command of reading, computing, and thinking that was once necessary only for the professions.

Higher Language, Math, and Reasoning Skills Will Be Needed. Analysis shows that most jobs will require much higher levels of math, language, and reasoning ability. When these specific skill requirements are averaged, only 4 percent of the new jobs can be performed by persons at the lowest skill levels, compared to 9 percent today.

Low-Skill Jobs Are Declining. While the overall pattern of growth is weighted toward higher skilled occupations, very large numbers of new jobs will be created in some medium-to-low-skilled fields. In fact, in absolute numbers the biggest job categories to be created will be service occupations, administrative support, and marketing and sales, which together will account for half of the net new jobs.

In the service category, the largest groups of workers will be cooks, nursing aides, waiters, and janitors. Among administrative support jobs, secretaries, clerks, and computer operators will predominate. In marketing and sales, most of the new slots will be for cashiers. With the exception of computer operators, most of these large categories require only modest levels of skills. But even for these jobs, which typically fall in the middle range of skills needed for present jobs, workers will be expected to read and understand directions, add and subtract, and speak and think clearly. In other words, jobs now in the middle of the skill distribution range will become the least skilled occupations of the future. For unskilled workers job opportunities will be very scarce.
illegal immigrants are projected to enter the workforce between now and the year 2000. The average age of both will rise and the pool of young workers will shrink. Changes in the job market will affect the different groups in different ways. Older workers who lose jobs will be hard-pressed to match previous salaries when they find new ones. While young whites may find their job prospects improving, for black men and Hispanics the job market will be particularly difficult. In contrast to their rising share of the new entrants into the workforce, black men will hold a declining fraction of all jobs if they simply retain their current share of various occupations. Black women, however, will hold a rising portion of the new jobs, though this increase will be less than needed to offset their growing share of the workforce.

The study sees employers having a new and more extensive role to play in the development of their workforces. It holds that they are among the most knowledgeable designers of cost-effective training programs and that "second chance" educational systems developed at the worksite are likely to play a key role. But it also calls for government-funded R&D programs aimed at improving the nation's productivity. The concluding words of Workforce 2000 are these:

"Promoting world growth, boosting service industry productivity, stimulating a more flexible workforce, providing for the needs of working families with children, bringing minorities into the workforce, and improving the educational preparation of workers are not the only items on the nation's agenda between now and the year 2000 but they are certainly among the most important. More critically, they are issues that will not go away by themselves. If nothing unusual is done... they are likely still to be with the nation at the beginning of the next century. The time to address them is now."