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Thinking About the Future: Job Opportunities in the Milwaukee Labor Market | curriculum ideas | SCANS form | Hmong translation

University of Wisconsin-Milwaukee, Employment & Training Institute

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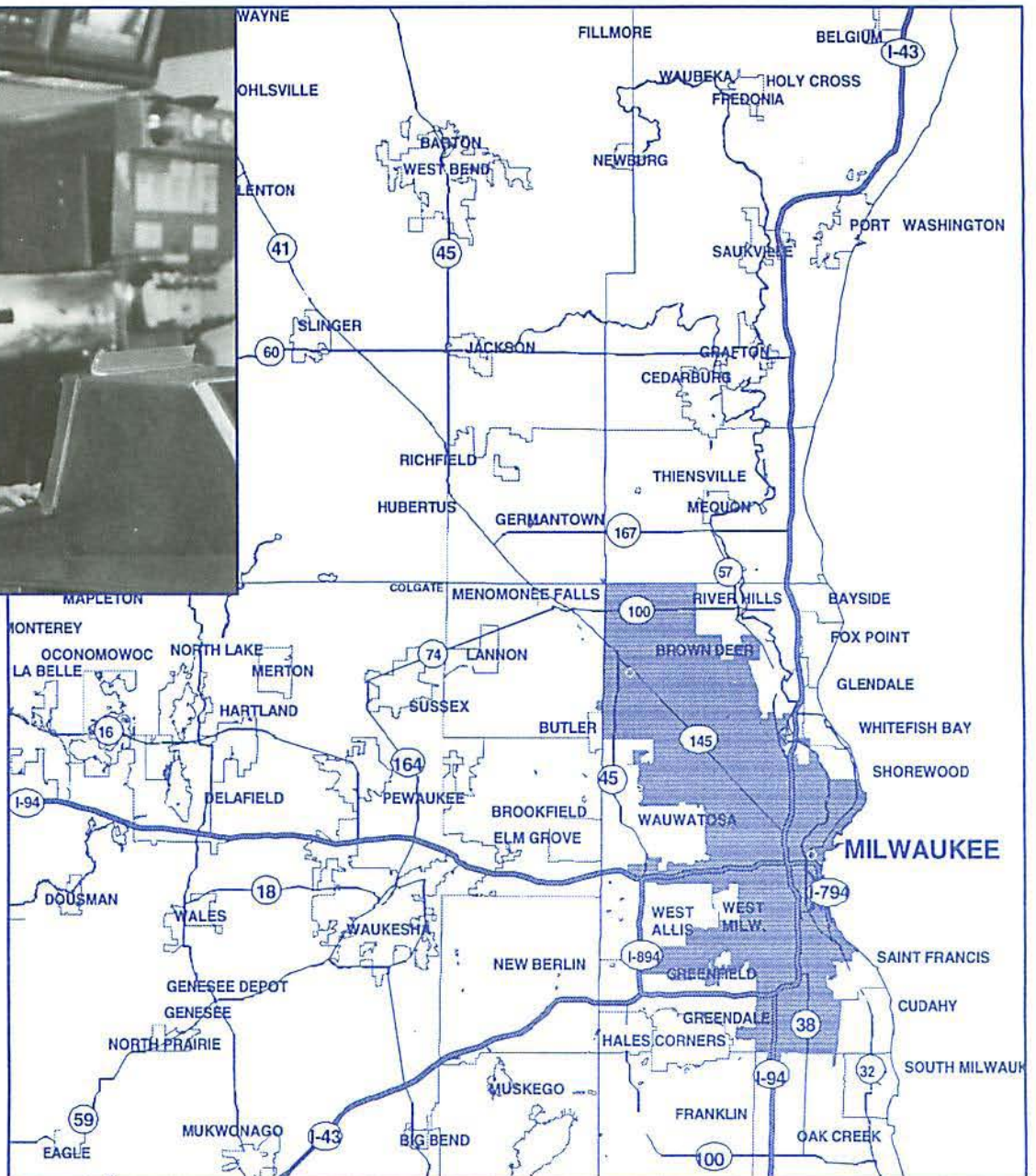
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Thinking About the Future:

Job Opportunities in the Milwaukee Labor Market



MILWAUKEE LABOR MARKET PROJECT



Learning About the Milwaukee Area Job Market

To help you plan for jobs of today and the future, we regularly contact Milwaukee area employers to find out what kinds of jobs they have available and what levels of education, training and experience are required. This report gives you a "snapshot" of jobs available the week of May 20, 1996, in the four counties where most Milwaukee workers are employed – Milwaukee, Ozaukee, Washington and Waukesha counties. In May 1996 Milwaukee area companies, governments and organizations reported openings for an estimated 18,687 full-time workers (where employees work at least 35 hours a week) and 10,570 jobs for part-time workers.

Looking at these jobs can give you an idea of what kinds of work you might consider when you enter the labor market. You can also see the education and training requirements companies expect for their new workers.



Nguyen (Winn) Tran, the art director for a local manufacturing business, designs advertisements for trade publications, sales flyers and brochures and produces videotapes. "It took me six years to get through college because I had to quit halfway through to earn the money to continue." But he got a job where he would "rather be working than doing anything else."



THE PAY-OFF FOR EDUCATION IN THE LABOR FORCE

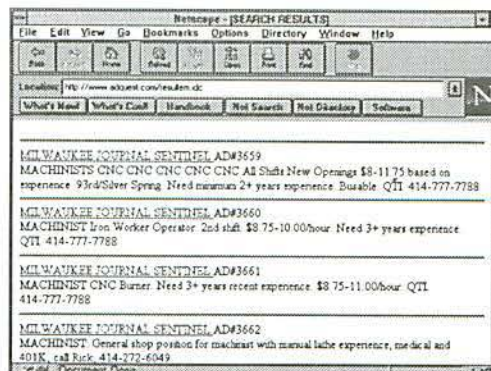
Education and Training Make a Difference.....	2
Jobs Requiring Four or More Years of College	4
Jobs Requiring Technical Training or Occupation-Specific Experience	6
Jobs with No Experience Required	8

KINDS OF BUSINESSES HIRING WORKERS

Who is Hiring and Why	10
Creating Your Own Job	11
Location of Milwaukee Area Job Openings	12
Planning Transportation to Jobs.....	13

PREPARING TO ENTER THE WORLD OF WORK

How to Look for a Job (or Find Out About Jobs You May Want in the Future)	14
The Part-Time Job Market	16
Securing a Work Permit.....	17
Work Skills You Can Gain in School, Volunteer or Part-Time Jobs	18



Education and Training Make a Difference

To plan for your future in the labor force, you need to know where the jobs are and what kind of jobs are available. There are many factors to consider when choosing a job. The most important question to ask is, "Does this job help me achieve my long term goals?" Some other considerations in selecting a job include:

??? Does this job provide on-the-job training or experience that will help me in the future?

??? Is this work that will use my skills and abilities?

??? Will I have a chance to advance in this company if I do well?

??? Will this job help me save money (or give me the time I need) to go to school for more education and training?

??? What benefits are available?

??? What is the atmosphere of the workplace?

??? Will I enjoy working here?

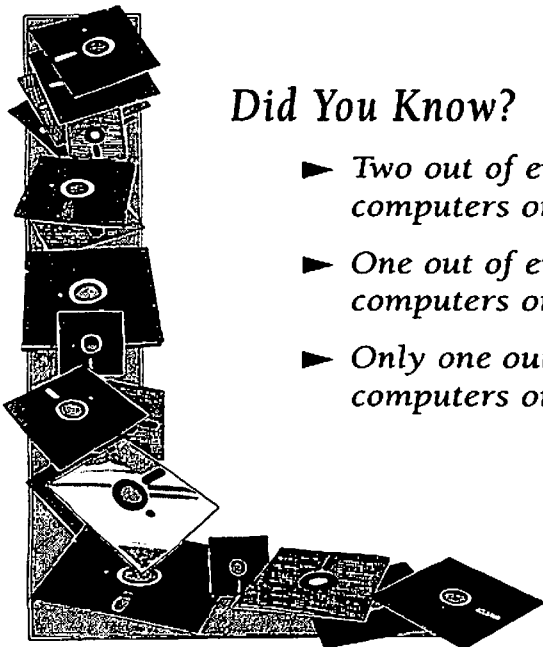


TYPICAL STARTING WAGES FOR MILWAUKEE AREA FULL-TIME JOB OPENINGS: MAY 1996

<i>Qualifications Required</i>	<i>Typical Starting Wage</i>
<i>Four-year college degree or more</i>	<i>\$18.04</i>
<i>Two-year college associate degree</i>	<i>\$11.87</i>
<i>Technical training, certification, license, or occupation-specific work experience</i>	<i>\$10.32</i>
<i>High school graduate, no experience</i>	<i>\$6.85</i>

For many jobs, companies require workers to have specific education and training. When we asked employers what jobs they had available in May 1996 they told us first, that the majority of their job openings required education, training or work experience beyond high school. Secondly, they said that jobs for workers with technical or college training usually paid more than jobs for workers with less education or experience.

While these wages are typical, each company decides the amount of pay to offer for job openings based on many factors. These include the education and training required, skills needed to handle the job, the amount of responsibility the worker has, the number of job seekers interested in this kind of work, and wage contracts with current workers. Experienced workers usually make more money than employees just starting in a field and most companies provide annual pay increases to their employees.

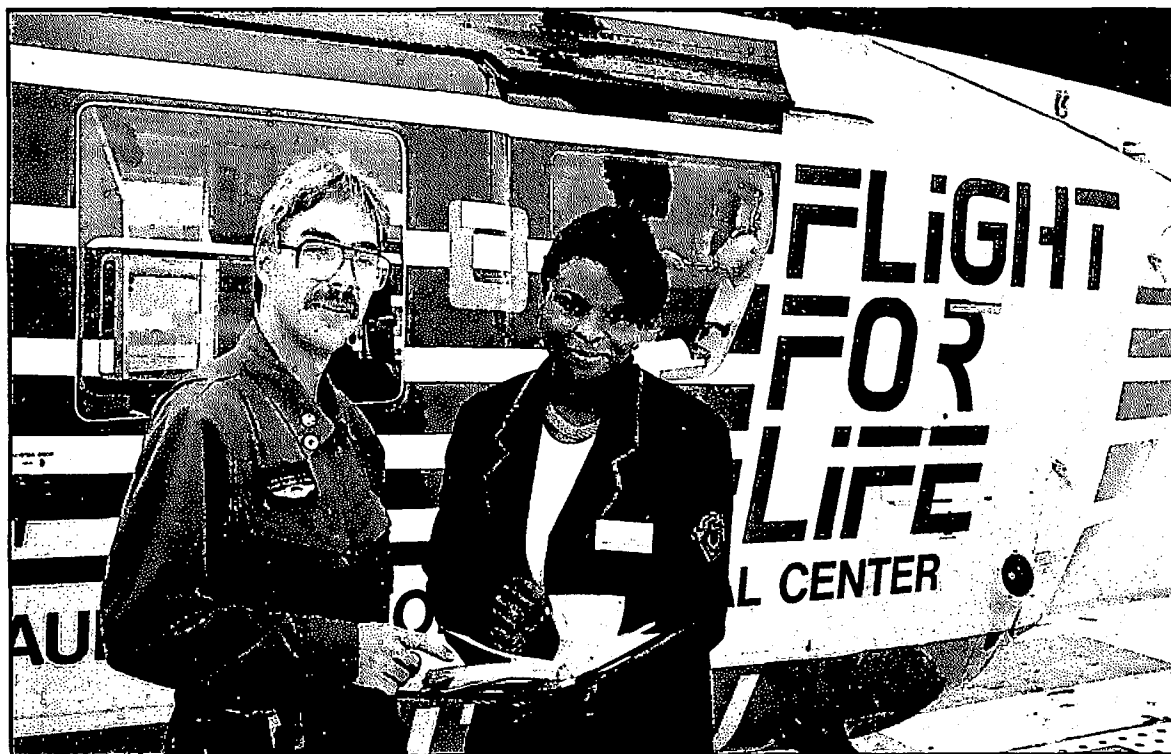


Did You Know?

- ▶ *Two out of every three college graduates use computers on the job.*
- ▶ *One out of every three high school graduates uses computers on the job.*
- ▶ *Only one out of every ten high school dropouts uses computers on the job.*

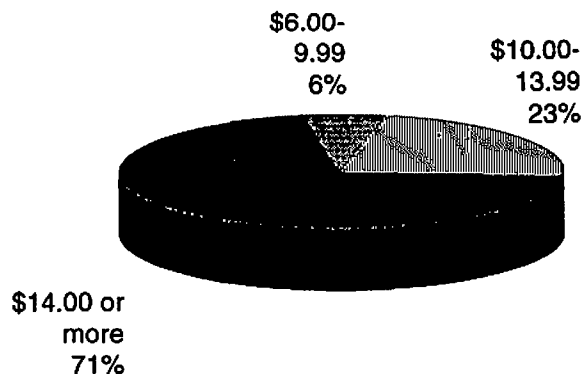
Jobs Requiring Four or More Years of College

Companies and agencies looking for college graduates have a variety of jobs available throughout the year. In May 1996, occupations in most demand were in computer work, engineering, teaching, nursing and sales. Because these jobs require more education and training, they tend to show less turnover than lower-skilled jobs.



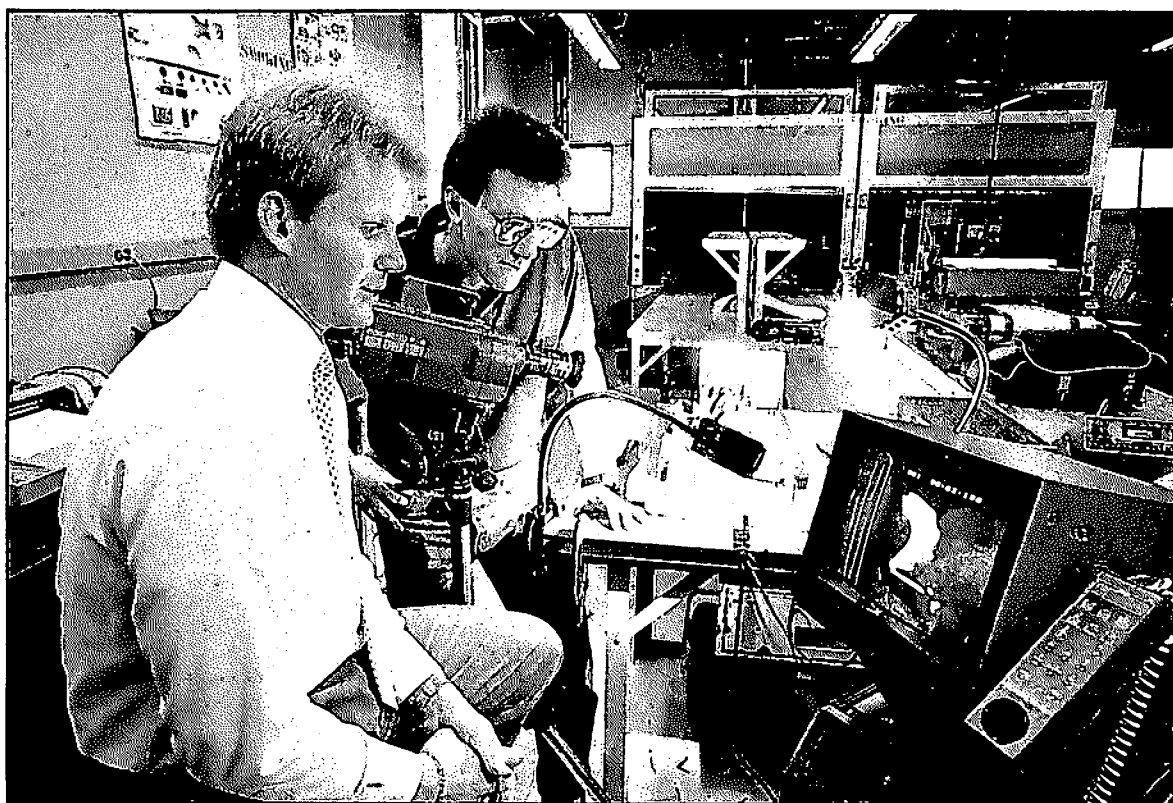
Jacqueline Sills-Ware and head flight nurse Jim Singer scheduled tours of Flight for Life operations for student and other groups. Jacqueline, who earned a bachelor's degree in allied health, returned to the University of Wisconsin-Milwaukee for a master's degree in order to increase her business skills.

The majority of jobs for graduates with a four-year college degree or more offered at least \$14.00 an hour in starting pay.



FULL-TIME JOBS REQUIRING A FOUR-YEAR COLLEGE DEGREE OR MORE (JOBS WITH MORE THAN 50 OPENINGS IN MAY 1996)

Examples of Job Openings	Typical Starting Wage
Engineers, civil, electrical, electronics and other	\$18.96
Computer programmers	\$19.08
Computer operators	\$14.66
Computer systems analysts and scientists	\$22.22
Operations and systems researchers and analysts	\$17.63
Teachers, kindergarten through high school	\$17.47
Registered nurses	\$17.56
Advertising and related sales occupations	\$12.44
Sales workers, radio, TV, hi-fi, and appliances	\$17.31



Students in UWM engineering courses learn to use "high-tech" equipment to test products. Companies will need more engineers in order to remain competitive, to use new technologies, and to replace engineers who retire or move into management or sales jobs.

Jobs Requiring Technical Training or Occupation Specific Experience

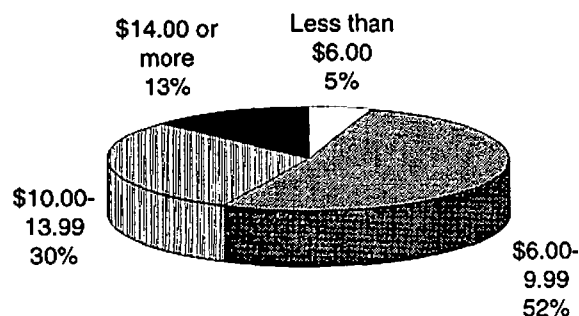
Most job openings require training after high school, a certificate showing that you have specific skills, or previous on-the-job experience. These jobs usually pay higher starting wages and many offer opportunities for advancement. When you enter the labor market, you will be competing with older workers who have lots of on-the-job training and experience. You can improve your chances of being hired by going to a technical college or trade school for training. Oftentimes the teachers at these schools have contacts with companies and can serve as references for jobs.



Milwaukee Area Technical College receives 28 job requests for every graduate in its one-year machine tool operations program.

Tool and die makers	\$14.30
Drafting occupations	\$11.65
Computer programmers	\$16.44
Bus, truck and stationary engine mechanics	\$11.61
Molding and casting machine operators	\$18.92
Carpenters	\$12.75
Numerical control machine operators	\$17.61
Heating, air cond., refrigeration mechanics	\$15.00
Welders and cutters	\$12.17
Automobile mechanics	\$10.00
Communications equipment operators	\$10.03
Assemblers	\$7.62
Secretaries	\$9.96
Bookkeepers, accounting, auditing clerks	\$9.32
General office clerks	\$8.48
Receptionists	\$7.90
Information clerks	\$8.27
Supervisors, general office	\$10.70
Bank tellers	\$7.39
Supervisors, distr., scheduling, adjust clerks	\$10.42
Nursing aides	\$7.90
Health record technologists and technicians	\$8.30
Health technologists and technicians	\$11.48
Health aides, except nursing	\$8.19
Driver-sales workers	\$6.90
Supervisors and proprietors, sales	\$10.34
Sales support occupations	\$9.46
Sales workers, other commodities	\$7.32
Sales workers, motor vehicles and boats	\$7.75
Securities and financial services sales	\$8.50
Sales, other business services	\$9.75
Insurance sales occupations	\$9.36
Supervisors, food preparation and service	\$9.48
Child care workers	\$7.43
Waiters and waitresses	\$2.88+tips
Hairdressers and cosmetologists	\$6.50+tips
Protective service occupations	\$11.12
Truck drivers	\$10.43
Retail and wholesale trade laborers	\$7.62
Helpers, mechanics and repairers	\$12.60
Janitors and cleaners	\$9.04
Construction laborers	\$10.96

Half of the full-time jobs requiring an associate degree, certification or occupation-specific experience pay \$9.00 or more an hour, and 13 percent pay \$14.00 or more an hour.



This table shows full-time jobs requiring an associate degree, certification or occupation-specific experience for jobs with more than 50 openings in May 1996.

Jobs With No Experience Required

Most companies want to hire persons who have earned their high school diploma and gained some specific work experience or training. There are a number of entry-level jobs available in today's labor market where the company does not require technical training or occupation-specific work experience. In some cases a high school diploma is required and in other cases the company will consider any applicants. The list on page 9 gives you an idea of the kinds of entry-level jobs with more than 50 full-time openings in May 1996.

High school graduation has two immediate payoffs in the labor market. First, it increases the number of jobs available to you. Secondly, it opens up opportunities for post-secondary education and training. According to U.S. Census Bureau studies, the gap between the earnings of high school dropouts and graduates is widening over time.

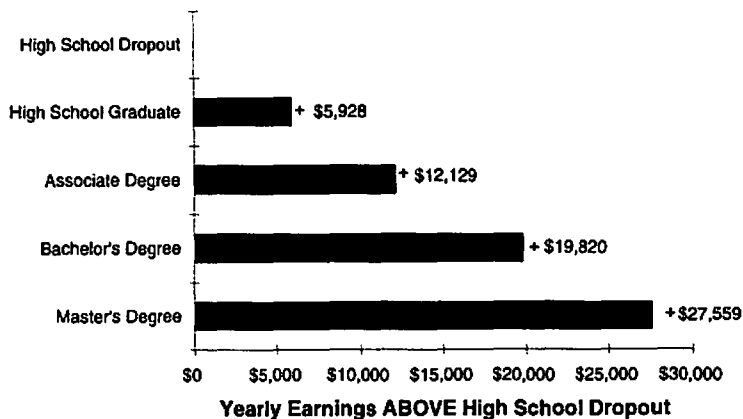
EDUCATION: IT PAYS FOR THE REST OF YOUR LIFE

On average high school graduates earn \$5,928 more a year than high school dropouts during their adult work life, according to 1992 U.S. Census data.

Workers with college associate degrees earn an average of \$12,129 more each year than workers who have not completed high school.

Workers with a college bachelor's degree earn an average of \$19,820 more a year than high school dropouts and persons with master's and doctor's degrees earn even more.

Education: It Pays for the Rest of Your Life



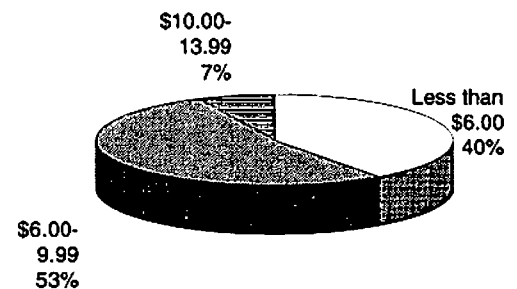
ENTRY-LEVEL FULL-TIME JOB OPENINGS: MAY 1996

Jobs with More than 50 Openings Typical Starting Wage

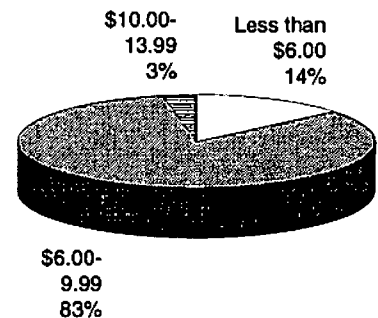
Mail preparing/paper handling machine operators	\$6.62
Handworking occupations and assemblers	\$7.40
Laborers	\$6.57
Garage and service station related occupations	\$6.00
Freight, stock and material handlers	\$7.25
Roofers	\$8.00
Helpers, mechanics and repairers	\$6.58
Painters, construction and maintenance	\$8.00
Metal and plastic processing machine operators	\$6.50
Inspectors, tests and graders	\$6.95
Pressing machine operators	\$7.37
Protective service occupations	\$7.00
Guards and police, private	\$6.25
Janitors and cleaners	\$6.94
Maids and housemen	\$6.09
Welfare service aides	\$6.34
General office clerks	\$6.00
Securities and financial service sales occupations	\$7.95
Sales support occupations	\$6.57
Cashiers	\$5.31
Street and door-to-door sales workers	\$7.85
Driver-sales workers	\$6.69
Sales workers, other commodities	\$5.33
Sales counter clerks	\$6.00
Food counter, fountain and related occupations	\$4.88
Miscellaneous food preparation occupations	\$6.31
Waiters and waitresses	\$3.27+tips
Supervisors, food preparation and service	\$10.34
Kitchen workers, food preparation	\$6.13
Cooks	\$6.06
Waiters' and waitresses' assistants	\$4.86

In May 1996, only 14 percent of Milwaukee area jobs requiring high school graduation but no experience paid less than \$6.00 an hour, compared with 40 percent of jobs for workers without a high school diploma.

JOBS WITH NO EDUCATION OR EXPERIENCE REQUIREMENTS



JOBS REQUIRING HIGH SCHOOL GRADUATION, BUT NO EXPERIENCE



Who is Hiring and Why

At last count, there were nearly 36,000 companies doing business in the four-county Milwaukee area. When we contacted a sample of these companies in May 1996, one out of every four companies reported that they had at least one job opening! The number and type of jobs open vary all year long. A healthy growing economy combined with fewer young adults entering the labor force has created a job shortage of full-time and part-time workers in many skilled and unskilled occupations. In any given week a business may have job openings for several reasons.

1. All companies need to replace current workers who leave for other jobs, retire, or are fired. The highest turnover is for jobs which have low pay, low status, few training requirements, and a large number of young or part-time workers.
2. Growing companies expand and need more workers. Many job openings are in small and growing companies. In fact, over half of the jobs available in the Milwaukee area are in businesses with less than 50 employees.
3. Many job openings are in service firms, such as hospitals and nursing homes, business offices, and social service agencies. Service sector jobs are in high demand for both full-time and part-time employment. Health care occupations and security guards make up almost half of the openings in this sector. Health care fields are expanding in part because of the growing number of elderly people and increased use of new medical technology to diagnose and treat health problems. The large number of jobs for security guards is due to high turnover in this field and increased concern about crime and vandalism.
4. Retail trade jobs are in high demand for both full-time and part-time work in eating and drinking places, auto dealerships and service stations, grocery stores, department stores, and furniture and apparel stores. Restaurants make up one-third of full-time retail job openings and almost 60 percent of part-time retail openings. Much of the demand in this field is due to high turnover of workers and a shortage of new labor force entrants. Also, families are eating out more, especially at fast food restaurants.
5. Manufacturing companies show a high demand for full-time employees for both skilled and unskilled workers. During the 1980's many factory jobs were lost in Milwaukee County due to worker layoffs and plant closings. These job losses were caused in part by national economic recessions, the increased automation of work, movement of plants to other U.S. and overseas locations, and changing consumer demand for products.

More recently, however, employment in manufacturing has increased steadily, particularly in the outlying counties of Waukesha, Washington and Ozaukee counties. There is new demand for the better paying jobs because of company growth, retirements of older workers, and a decrease in the number of new workers entering manufacturing. Workers are needed in Milwaukee area companies manufacturing computer equipment, printing and publishing materials, plastics, fabricated metals and leather goods.

6. A large company is much more likely to have openings than smaller ones due to worker turnover because of retirements, firings and persons leaving the company. Three-fourths of the area's largest companies (with 250 or more employees) had job openings this spring, compared to 15 percent of the smallest companies (with less than 20 employees).
7. A small company is less likely to have job openings at any given time. However, as a group small companies make up 83 percent of all companies in the Milwaukee area and have over a third of job openings. These companies should be seen as an important source of employment. New companies are always starting up and in many cases these companies are also hiring new workers.
8. Some businesses have seasonal work. For example, construction work slows way down in the winter months. Department stores hire more workers when shopping increases over the year-end holidays. Fast food restaurants often hire more students during the summer.

Creating Your Own Job

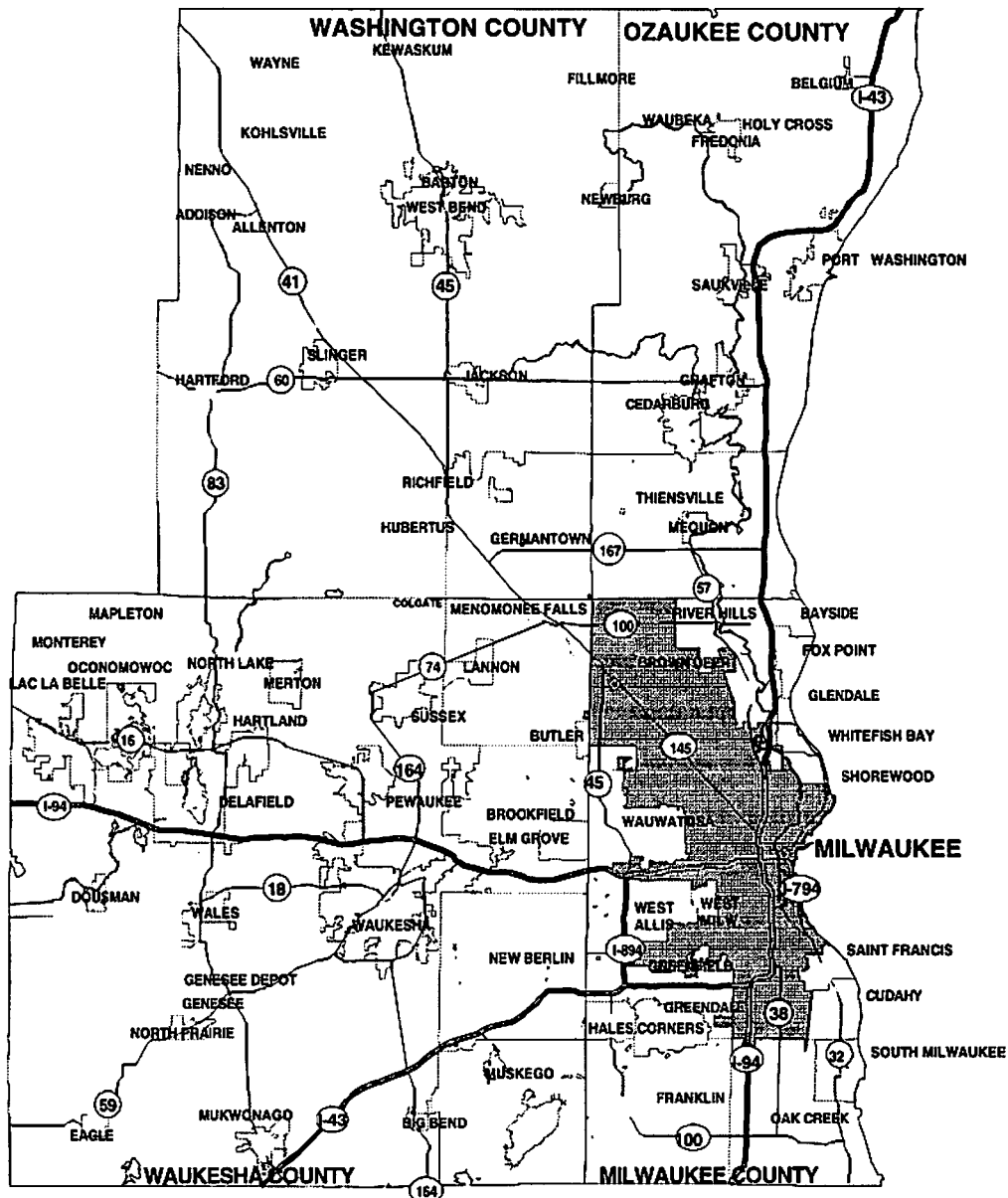
Nearly 3,500 full-time and part-time job openings in May 1996 were in Milwaukee area companies with fewer than five workers. Often these companies are started by talented individuals who like to work independently. Examples of small businesses which are creating jobs for Milwaukee area workers include:

- ▶ landscaping firms
- ▶ painting contractors
- ▶ building contractors
- ▶ travel agencies
- ▶ clothing shops
- ▶ computer equipment stores
- ▶ home furnishings stores
- ▶ financial management firms
- ▶ dance studios
- ▶ automotive services
- ▶ medical offices.



Location of Milwaukee Area Job Openings

Employers with job openings are located throughout the Milwaukee area. About 25 percent of current job openings are with companies, businesses and governments located in the City of Milwaukee. Another 35 percent of the jobs can be found in the Milwaukee County suburbs. Forty percent of jobs are available in Waukesha, Ozaukee and Washington counties. Employers in these counties are reporting a number of entry-level jobs that they are finding difficult to fill.



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Oakland Kinnickinnic

Effective August 25, 1996

Service To	Service Hours
Bay Shore Mall	Mon. - Fri.
Village of Whitefish Bay	4:30 AM - 1:30 AM
Village of Shorewood	
University of Wisconsin - Milwaukee	Saturday
Downtown Milwaukee	4:30 AM - 1:30 AM
City of St. Francis	
Packard Plaza	Sunday
City of Cudahy	5:00 AM - 1:00 AM
City of South Milwaukee	

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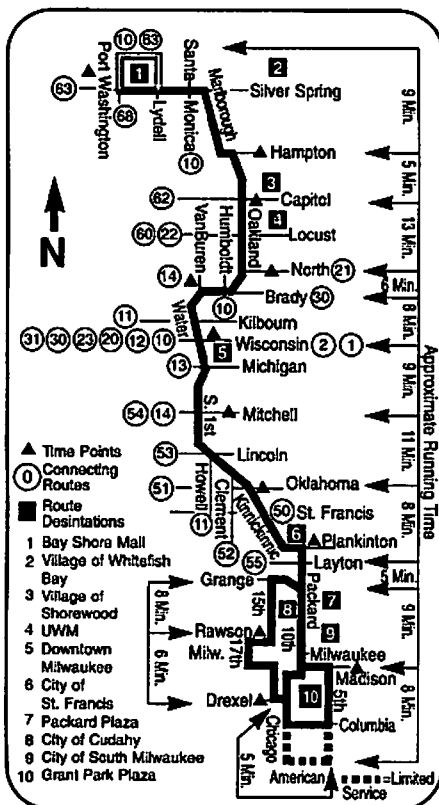
For additional information:

344-6711

8:00 AM - 10:00 PM Sun. - Sat.



printed on recyclable paper



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Oakland Kinnickinnic

PLANNING TRANSPORTATION TO JOBS

Since job opportunities go beyond the city boundaries and the county bus lines, you may need to find creative ways to get to jobs outside your neighborhood.

- Pick up maps and schedules of bus routes to locate job sites you can reach by Milwaukee County bus.
- Think about getting a driver's license. Then, make sure that you maintain a good driving record and pay any parking or traffic fines.
- Learn how to do routine auto maintenance work yourself or with friends to reduce the costs of keeping a car.
- Most auto insurance companies offer lower rates for students who get good grades in school.
- If you don't have access to a car, find other workers who commute to companies outside your neighborhood.
- Talk to the Job Center-North or Job Center-South about "shared ride" programs or vans traveling to companies in the Milwaukee area.

Jobs involving driving cars, trucks or buses require a valid Wisconsin driver's or chauffeur's license. In some cases, like truck drivers, most employers also require workers to have technical training or previous work experience. Typical hourly pay for recent job openings ranged from \$4.50 an hour plus tips for part-time taxicab drivers and chauffeurs to \$10.37 an hour for full-time truck drivers.

How to Look for a Job (or Find Out About Jobs You May Want in the Future)

This Spring over 18,600 full-time jobs and 10,500 part-time jobs were available in the Milwaukee area. At the same time about 28,500 unemployed persons were looking for work and a number of employed workers were looking for different jobs. In order to be successful, it is important to use a variety of job search strategies and to contact employers throughout the Milwaukee area. Consider using at least seven methods of job-hunting.

CONTACT FRIENDS AND RELATIVE ABOUT JOB OPENINGS

The majority of job seekers will find a job through someone they know. Many companies post job listings at work before advertising to the general public. Small businesses often look for new workers by talking to people they know.

REGISTER AT THE JOB CENTER FOR INFORMATION ABOUT JOB OPENINGS

The Job Center-North (2800 W. Capitol Drive, phone 871-6400) and Job Center-South (601 W. National Avenue, phone 384-4000) offer computer listings of job openings. The job centers also have information about job training and education programs to help you qualify for good paying jobs. Because these job centers work with a large number of companies in the Milwaukee area, they can tell you about jobs outside your neighborhood.

READ THE WANT-ADS IN LOCAL AND COMMUNITY NEWSPAPERS

For jobs in your neighborhood, check out community newspapers, newsletters from community and religious organizations, and notes posted at local stores. For Milwaukee area jobs, pick up a copy of the Sunday Milwaukee Journal Sentinel. If you are interested in finding out about jobs in another city or state, the Milwaukee Central Library (814 W. Wisconsin Avenue) has newspapers from other parts of the country.

PLACE APPLICATIONS WITH EMPLOYERS THROUGHOUT THE MILWAUKEE AREA

You may apply directly with companies listed in the want-ads or phone book yellow pages. It's a good idea to find out what kind of work the company does by talking to friends and neighbors, doing research at the library, and reading the local newspaper. Many jobs are available in Waukesha, Ozaukee and Washington counties and in the suburbs. If you don't have a car, call the Milwaukee County Transit System (phone 344-6711) for information about the nearest bus routes. Call the Job Centers about any vans or shared ride programs to that area.

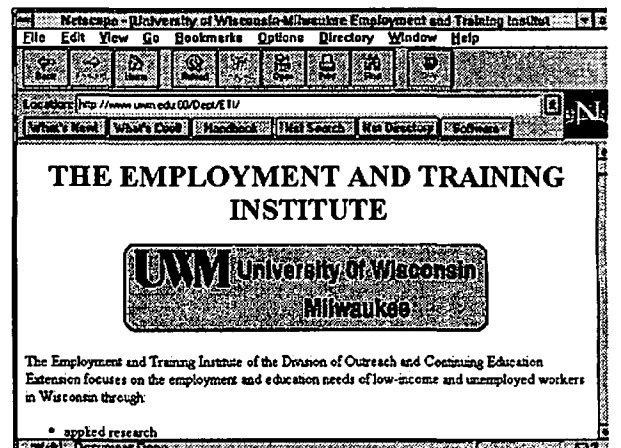
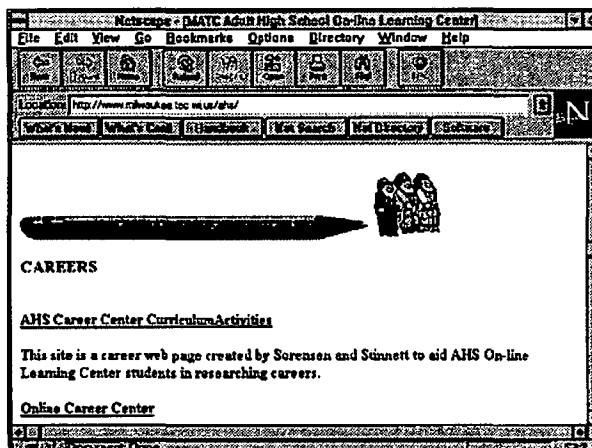
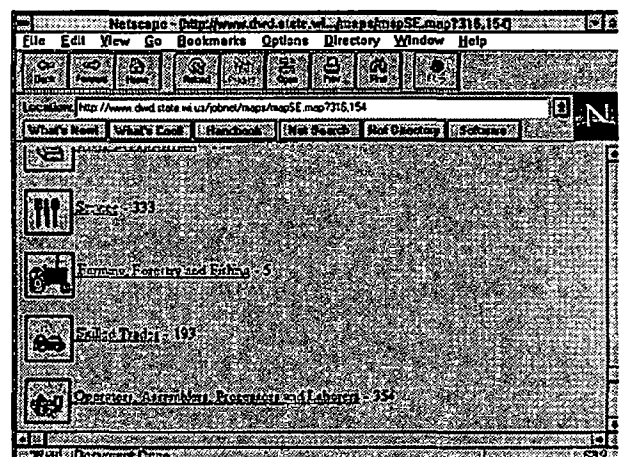
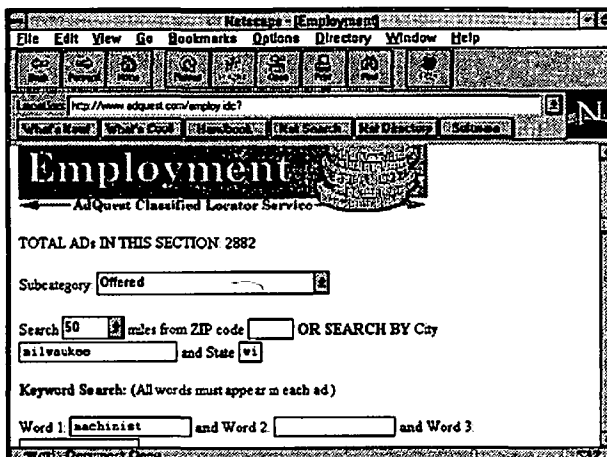
CONSIDER USING A TEMPORARY EMPLOYMENT AGENCY TO FIND WORK

Temporary jobs can help new workers gain work experience and sometimes lead to permanent work. Some temp agencies will also help you assess your skills and offer short-term job training.

SURF THE INTERNET FOR JOB OPPORTUNITIES

Listings of current job openings advertised in the want-ads of the Milwaukee Journal Sentinel are shown on the Internet (<http://www.adquest.com>). Job openings listed with the Wisconsin Job Service Offices can also be viewed on the Net (<http://jobnet.dwd.state.wi.us/>). Changes in job requirements, pay rates, and types of companies hiring workers in the Milwaukee area are reported on the University of Wisconsin-Milwaukee Employment and Training Institute web site (<http://www.uwm.edu/Dept/ETI/>).

You can learn more about career programs available through the Milwaukee Area Technical College on the Internet (<http://www.milwaukee.tec.wi.us/>). The University of Wisconsin-Milwaukee describes its programs on the Net (<http://www.uwm.edu>).



The Part-Time Job Market

There were about 10,570 part-time jobs available in the Milwaukee area in May 1996. These jobs employ workers for less than 35 hours a week and are sometimes temporary. The largest number of part-time jobs are available with retail and wholesale trade companies (e.g. restaurants, department stores, grocery stores, supply outlets) and in service work (e.g. hospitals, nursing homes, business offices, recreation and social service agencies). Part-time jobs offer a chance for new workers to develop employment skills and to gain a "work history." They may also lead to a job offer for full-time work. However, few part-time jobs offer health insurance or year-round wages high enough to support an individual or family.



Many students work part-time in fast food restaurants to help pay for their college education.

PART-TIME JOBS WHICH OFTEN DO NOT REQUIRE PRIOR EXPERIENCE OR EDUCATION

<i>Jobs with More than 50 Openings</i>	<i>Typical Starting Wages</i>
<i>Food counter, fountain and related occupations</i>	<i>\$5.06</i>
<i>Miscellaneous food preparation occupations</i>	<i>\$5.57</i>
<i>Kitchen workers, food preparation</i>	<i>\$5.49</i>
<i>Waiters and waitresses</i>	<i>\$4.93+tips</i>
<i>Cooks</i>	<i>\$6.12</i>
<i>Waiters'/waitresses' assistants</i>	<i>\$5.02</i>
<i>Bartenders</i>	<i>\$5.87</i>
<i>Cashiers</i>	<i>\$5.21</i>
<i>Sales workers, other commodities</i>	<i>\$5.79</i>
<i>Sales support occupations</i>	<i>\$5.36</i>
<i>Sales counter clerks</i>	<i>\$5.07</i>
<i>General office clerks</i>	<i>\$6.00</i>
<i>Laborers</i>	<i>\$6.06</i>
<i>Janitors and cleaners</i>	<i>\$5.84</i>
<i>Vehicle washers and equipment cleaners</i>	<i>\$4.83</i>
<i>Protective service occupations</i>	<i>\$5.50</i>
<i>Guards and police, private</i>	<i>\$6.38</i>
<i>Bus drivers</i>	<i>\$8.42</i>
<i>Welfare service aides</i>	<i>\$6.37</i>
<i>Health aides, except nursing</i>	<i>\$6.21</i>

For Younger Workers: Securing a Work Permit

Many youth begin working in their teens or earlier for people in their neighborhood – doing babysitting, lawn mowing, leaf raking, snow shoveling or helping their parents on the farm. State laws regulate what kinds of work youth can do and the hours they can work. For example, boys and girls ages 12 and up may be employed as golf caddies, newspaper carriers, or selling magazines and other products door-to-door. The state allows fourteen-year-olds to work at camps, ball parks, restaurants, gas stations, grocery stores, schools and retail stores. Sixteen-year-olds may work as life guards, swimming instructors, and at many construction sites, warehouses, and factories.

Students offered jobs by companies or organizations are usually required to obtain a work permit. You can apply for a permit from your school office or from the Step Up Program. You will need proof of your age (your birth certificate or baptismal certificate), your social security number, a written description of the job offer from your employer, and written permission from your parent or guardian. Along with the work permit, you will receive information on the number of hours you can work on school days, weekends and during the summer.

MAXIMUM WORK TIME PERMITTED FOR YOUTH IN WISCONSIN

	AGE:		
<u>Maximum Hours of Work</u>	<u>12-13</u>	<u>14-15</u>	<u>16-17</u>
Daily:			
<i>School Days: Except Last School Day of the Week</i>	4 hr.	4 hr.	5 hr.
<i>Last School Day of Week and Non-School Day</i>	8 hr.	8 hr.	8 hr.
<i>Day During Non-School Week</i>	8 hr.	8 hr.	Unlimited
Weekly:			
<i>School Week</i>	18 hr.	18 hr.	26 hr.
<i>School Week less than 5 Days</i>	24 hr.	24 hr.	32 hr.
<i>Non-School Week</i>	40 hr.	40 hr.	50 hr.

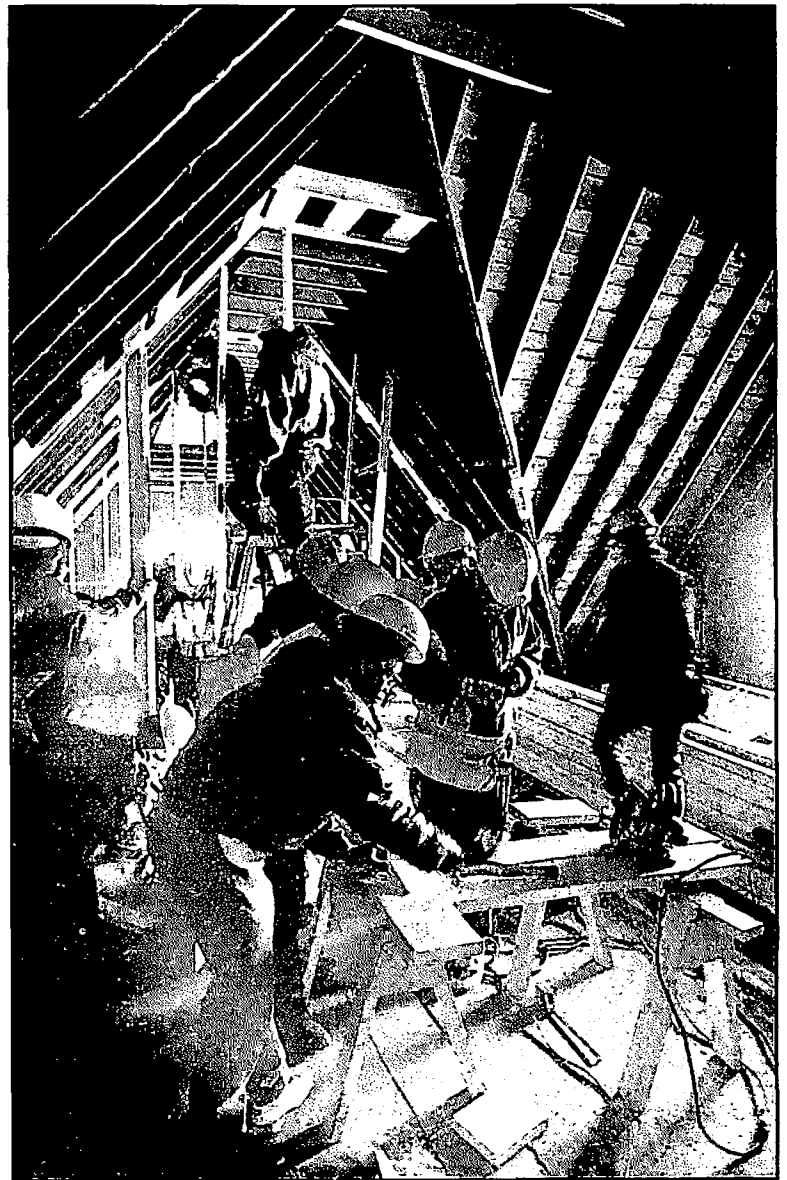
While part-time jobs offer you valuable experience and the chance to make money for yourself and your family, doing well in school will pay off even more for jobs in your future. Often times your best job reference will come from a high school teacher who can share information about your good study habits, success in school and ability to get along well with others.

Work Skills You Can Gain in School, Volunteer or Part-Time Jobs

Recently, the U.S. Department of Labor met with hundreds of employers, workers and supervisors to find out what kinds of skills people need in today's work place. They identified a series of basic work skills – which they call SCANS skills (after the Secretary of Labor's Commission on Achieving Necessary Skills). While many companies need workers who have specific technical and academic skills, they are most interested in workers who can cooperate on teams, allocate time and resources, process and evaluate information, understand organizational systems, and apply technology to their work.

When you look at the skills that are important to employers, you will quickly discover that you can improve many of your SCANS skills in school, at part-time jobs or through volunteer work in your community. You may want to keep a checklist of skills you've gained and examples of your work.

Milwaukee students renovated an office and two townhouses on W. Lincoln Avenue. A Bay View High School construction class served as the main demolition and carpentry crew and a Milwaukee Trade and Technical High School class was in charge of plumbing. The townhouse interiors were designed by home economics students and the exterior landscaping by a botany class. (Photo courtesy of the Milwaukee Sentinel)



WORKPLACE COMPETENCIES: INTERPERSONAL SKILLS

WORK ON A TEAM

- ☐ work cooperatively with others.
- ☐ contribute to group efforts with ideas, suggestions, and effort.

Examples:

You volunteer for a political campaign.
You help coach a sports team.
You organize a rock band or choral group.

TEACH OTHERS

- ☐ help others learn needed knowledge and skills.

You direct youth activities at a day care center or camp.
You train volunteers for an environmental project.

SERVE CLIENTS/CUSTOMERS

- ☐ work with customers to satisfy their needs.
- ☐ communicate with customers to understand their expectations.

You organize a snow shoveling business.
You work as a volunteer receptionist at your religious center.
You survey residents about a neighborhood issue.

EXERCISE LEADERSHIP

- ☐ communicate your thoughts, feelings and ideas to justify your position.
- ☐ persuade and convince others.
- ☐ responsibly challenge existing procedures or policies.

You testify at a school board meeting.
You contact elected officials about legislation you support.
You organize a neighborhood block club.

NEGOTIATE TO ARRIVE AT A DECISION

- ☐ work toward agreements involving exchange of resources,
- ☐ resolve divergent interests.

You help settle a dispute between your neighbors.
You serve on a peer mediation team.
You plan the family vacation.

WORK WITH CULTURAL DIVERSITY

- ☐ work well with people from a variety of ethnic, social or educational backgrounds.

You volunteer to work at ethnic festivals.
You help seniors at a local nursing home.
You participate in a citywide youth program.

WORKPLACE COMPETENCIES: TECHNOLOGICAL SKILLS

SELECT TECHNOLOGY

- ☐ judge which sets of procedures, tools or machines, including computers and their programs, will produce the desired results.

Examples:

You use consumer magazines to select the best CD player or answering machine to buy.
You help your family figure out which long distance phone company to use.

APPLY TECHNOLOGY TO TASK

- ☐ understand the overall intent and proper procedures for setting up and operating machines, including computers and their programming systems.

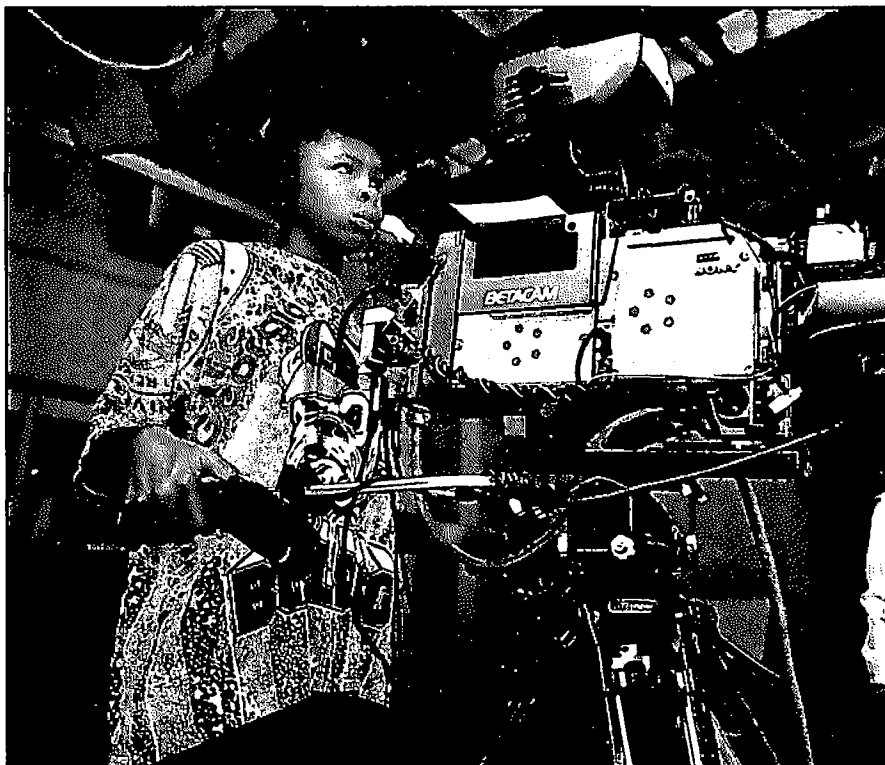
You use the Internet to communicate with people in another state or country.
You install VCR equipment for a friend.
You produce a video for a local cable TV station.

MAINTAIN AND TROUBLESHOOT TECHNOLOGY

- ☐ prevent problems in machines, computers and other technologies.
- ☐ identify problems in machines, computers and other technologies.
- ☐ solve problems in machines, computers and other technologies.

You read the instruction manual on caring for a furnace or appliance.
You learn how to maintain and repair an automobile.
You volunteer to help younger students in the computer lab.

Students prepare a video production as part of a School-to-Work Program with MATC.





Team work is as valued in the workplace as it is in sports.

WORKPLACE COMPETENCIES: ALLOCATING RESOURCES

ALLOCATE TIME

- ☐ rank work activities in order of importance.
- ☐ allocate time for activities.
- ☐ prepare a schedule of work activities.
- ☐ follow a work schedule.

Examples:

You arrive at school and work on time each day.
 You meet deadlines for your school newspaper or organization's newsletter.
 You establish the work schedule for a school or community event.

ALLOCATE MONEY

- ☐ handle money responsibly.
- ☐ prepare a budget with costs and revenues.
- ☐ keep good financial records.

You handle the cash register at work.
 You keep an account of your income and spending.
 You develop a budget for the soccer team.

ALLOCATE MATERIAL AND FACILITIES

- ☐ acquire, store, and distribute materials, supplies and parts.
- ☐ allocate and use space efficiently.

You maintain an inventory of work supplies.
 You plan the family food budget for a week.
 You set up garden plots on a vacant city lot.

ALLOCATE HUMAN RESOURCES

- ☐ assess the knowledge and skills of your co-workers.
- ☐ divide up work responsibilities based on people's abilities.
- ☐ provide feedback to others about their work.

You find ways to get along with different personalities on your sports team.
 You organize a fund-raising event for your drama group.
 You give your classmates feedback on their writings and presentations.

PARTNERS IN THE MILWAUKEE LABOR MARKET PROJECT

Milwaukee Area Technical College
Private Industry Council of Milwaukee County
Milwaukee Public Schools
City of Milwaukee
Employment and Training Institute, University of Wisconsin-Milwaukee

with funding support from the

Milwaukee Community Outreach Partnership Center,
University of Wisconsin-Milwaukee
U.S. Department of Housing and Urban Development
Helen Bader Foundation

This report was prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. Phone (414) 227-3388. The typical hourly pay rates shown for job openings are from surveys of Milwaukee area employers conducted twice each year by the Employment and Training Institute and Social Science Research Facility.

Photos are courtesy of Milwaukee Area Technical College, University of Wisconsin-Milwaukee and Milwaukee Journal Sentinel.

Curriculum Ideas for "Thinking About the Future: Job Opportunities in the Milwaukee Labor Market"



Introduction

This booklet is designed to help students use local labor market information and resources in their career planning. The economy is constantly changing because of new technology, shifting consumer demands, international developments and changing demographic trends. This "snapshot" of the labor market is presented to help students "learn how to keep learning" about their community. We hope that students will think about "making" as well as "taking" jobs and work to develop career pathways that offer expanding opportunities for challenging jobs throughout their lifetimes.

Competency: Recognize the payoff for education and training in the labor market.

1. Use the typical starting wages for full-time job openings on page 3 to calculate annual wages for each level of education and experience required. *Most jobs are for 40 hours a week for 52 weeks. When jobs have high turnover, e.g. door-to-door sales workers and food counter workers, persons may be employed for fewer weeks during the year.*

2. Encourage students to interview adult workers about why they chose their present job and what factors they think are important in choosing a job. Rate how important job satisfaction, social factors, recognition, creativity and money were in the person's career choice. Ask the students what they think of the adults' choices.

Use the student findings to develop a class list of important factors besides pay to consider when choosing a career. Does having more education and training help with these factors?

3. Discuss why the jobs on page 7 usually require technical training or on-the-job work experience. Use a program catalog from the Milwaukee Area Technical College or the Occupational Outlook Handbook to determine what kind of technical training would be required for several of the jobs.
4. Ask students to consider the advantages and disadvantages of jobs that require very little experience or training.

Advantages may include that these jobs are easier to obtain, often offer good pay for young people just starting out, and are easy to learn. Disadvantages include the higher turnover of workers, pay rates that may not increase over time because of the number of inexperienced workers competing for these jobs, less interesting work, and more frequent layoffs.

One out of every 8 high school dropouts in the Milwaukee labor force is working in food preparation and service. By contrast, only one out of every 28 workers with a high school degree or better is working in food preparation and service. (1990 U.S. Census)

5. Visit the local library or a school counselor's office to review booklets detailing educational programs available in the area. Discuss the advantages of various programs, including college, vocational training, on-the-job training, and apprenticeship programs. Help the students write a letter or phone for information about educational or training programs that interest them.
6. Discuss reasons why employers might prefer to hire workers part-time (that is, less than 35 hours a week or for a limited number of weeks) rather than full-time. Use the chalk board to list the advantages and disadvantages of part-time work.

Reading Review Questions

"Thinking About the Future: Job Opportunities in the Milwaukee Labor Market"

1. Why would a company prefer to hire high school graduates rather than high school dropouts for jobs that do not require special training? Which of the jobs listed on page 9 do you think could lead to better paying, more interesting work if you were willing to work hard and learn new skills? Which jobs do you think are "dead-end"?
2. What are factors companies consider in setting the wage and salary rates for new workers they hire? Why do you think companies are willing to pay more for workers with college education?
3. Which job openings for college graduates on page 5 require knowledge of technology? What high school courses do you think are important for these careers?
4. What are advantages of attending a technical college to gain training for jobs in high demand? Identify jobs on page 7 that you think would require both classroom education and on-the-job training.
5. List reasons why new jobs might be available in your community. For each reason, give an example of a job that might be available. Why are some occupations in less demand?
6. Why do workers need access to a car or carpool to reach many job openings in the Milwaukee area? What are the advantages of riding the bus or using a carpool when one is available?
7. Name methods you can use to find out about job openings in your community. What do you think are the strengths and limitations of one of the methods you have named?
8. What are the advantages and disadvantages of part-time jobs? Why do you think some people want to work part-time?
9. Give examples of jobs that young people may not have until they reach a certain age? Do you think this fair? Why or why not? Why do you think the state requires teens to obtain a work permit before starting a job?
10. Find several workplace skills on pages 19-21 that you already do well. What projects or activities have you done that might convince an employer that you have this skill?

Competency: Describe where and how to get labor market information.

1. Encourage each student to identify a career ladder in an area of interest (e.g. health, computers, working with children, food service). For example, in manufacturing a student might consider jobs at entry-level (assembler), requiring technical training (tool and die maker), or a college degree or more (industrial engineer). Arrange for each student to "shadow" a worker in his/her career interest area.
2. Invite a panel of local employers to discuss career ladders available within their companies. (Videotape the discussion to share with other classes.)
3. Help students use the want-ads to find interesting job openings, skill requirements, wages offered, working hours, and how to contact the company or agency.
4. Use the computer to access job openings in the Milwaukee area through the Milwaukee Journal Sentinel's listings (<http://www.adquest.com>) or the Wisconsin Job Service (<http://jobnet.dwd.state.wi.us/jobnet>).
5. Help students prepare a map of places to go for employment information. Sites could include the local public library, Milwaukee Central Library (for newspapers from other cities), Job Center-North, Job Center-South, a Wisconsin Job Service office (from the government pages of the phone book), and temporary employment agencies (from the Yellow Pages). Determine a way to get to these sites by car or bus.
6. Map a bus or street route from each student's home or school to at least six work sites in the metro area.
7. Ask students to list a career that interests them. Using local phone books, people they know, newspaper articles and resources in the library, find at least 5 area companies or agencies that might hire workers in this field.

Competency: Identify factors which influence access to jobs.

1. Arrange a one-day field trip of job sites throughout the metropolitan area. At each site ask employers why they are at that location and where other branches of the company are located. Ask what transportation issues are important to the company and its workers, e.g. securing raw materials, reaching markets, how workers commute to work, parking.
2. For one of the job listings tables in the booklet, compare wages for jobs usually held by women with those traditionally held by men. Have students prepare graphs which show wage differences for selected occupations. Discuss the advantages to companies in breaking down gender barriers.
3. Organize teams of students to explore strategies to increase employment opportunities for youth. For example, one team might prepare a report or videotape on appropriate and inappropriate behavior in a job interview. A second team might collect information comparing travel time and costs for car pools, vans and bus transportation to jobs. A third team could explore issues related to comparative housing costs in neighborhoods in the metropolitan area where jobs are in high demand. A fourth team could develop a plan to identify the "best" job opportunities for high school students at your school and how to access these jobs.
4. Discuss how housing and transportation factors in the Milwaukee area make it more difficult for some workers to find jobs and to learn about job openings in the metropolitan area. *According to the 1990 Census, over 80 percent of all African American youth under age 18 residing in the 1,400 square mile area of Milwaukee metro live in an a 25 square mile central city area.*
5. Help students organize a job fair or career awareness day to bring employers to your school to talk about job opportunities and future careers.

Competency: Use labor market information to help develop career goals.

1. The fastest growing occupations nationally are personal and home care aides, home health aides, systems analysts, computer engineers, and physical and corrective therapy aides. Occupations expected to show the greatest numerical declines include farmers, typists and word processors, bookkeeping and accounting clerks, bank tellers, and sewing machine garment workers. Brainstorm why. Then use the **Occupational Outlook Handbook** (paperback or CD-ROM) to find the reasons why the Department of Labor is predicting these occupational shifts.
2. Discuss why a person would choose a career area where there are few job openings. How might people increase opportunities in careers that interest them?
3. Discuss the concept of "labor market." Ask the students to suggest where they want to live after completing school (e.g. remain in Milwaukee area, another city, in a foreign country). Help students explore job opportunities in that locale by using want-ads from other cities, the Internet, and letters to professional organizations).

The U.S. Department of Labor defines a labor market area as "an economically integrated geographic area within which individuals can reside and find employment within a reasonable distance or can readily change employment without changing their place of residence." We use the four counties of Milwaukee, Ozaukee, Washington and Waukesha because they show the strongest commuting patterns. At the same time, some Milwaukee workers commute to Madison and even to Chicago, and many people from Sheboygan County work in Ozaukee County and vice versa.

4. Help students develop plans for a business they could create to meet a consumer or community need.

In May 1996 over a third (38 percent) of full- and part-time job openings were in Milwaukee area companies with fewer than 20 workers.

Competency: Identify resources available for student job seekers.

1. Ask students to share their experiences earning money in their neighborhood and through part-time jobs. What have they learned from these experiences?
2. Encourage students to build a "cumulative resume" which includes the SCANS skills they are improving through their school, volunteer and part-time work experience. Help students use the enclosed SCANS checklists to record activities and projects which are helping them improve their workplace skills. See *The Secretary's Commission on Achieving Necessary Skills, Learning a Living: A Blueprint for High Performance. A SCANS Report for America 2000* (U.S. Department of Labor, 1992) from the federal bookstore, 297-1304.
3. Help students create a "Jobs Network" chart to add to their portfolios. Encourage each youth to identify 15-20 adults he/she could ask about possible job openings at their workplaces. (Include relatives, neighbors, teachers, mentors, coaches, club leaders, parents' friends, local businesspersons, people from their church, synagogue or mosque.) Help the youth begin to expand this "Jobs Network" by asking at least one of the adults on the list to identify 5-10 additional contacts that the student might call when looking for jobs.

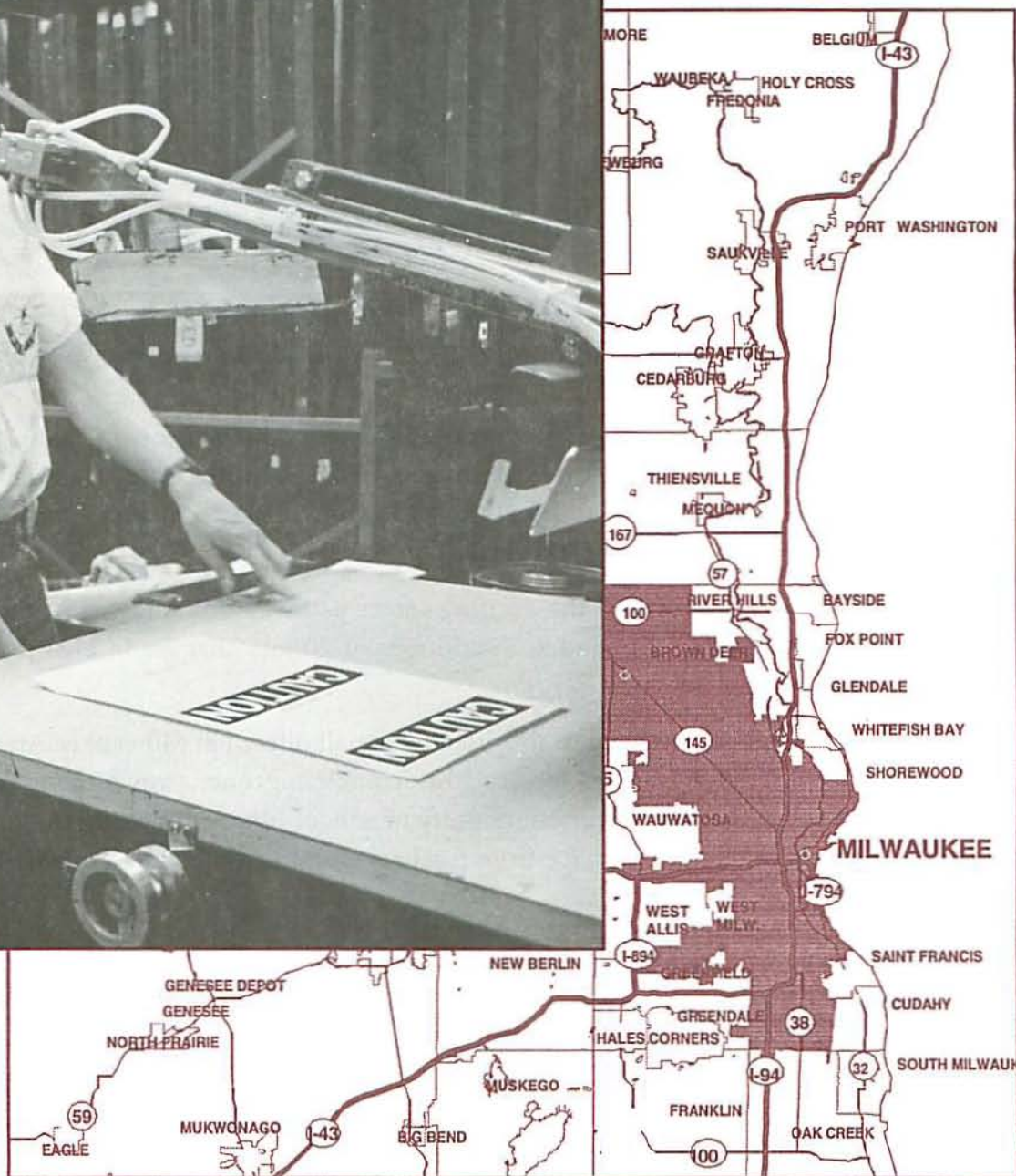
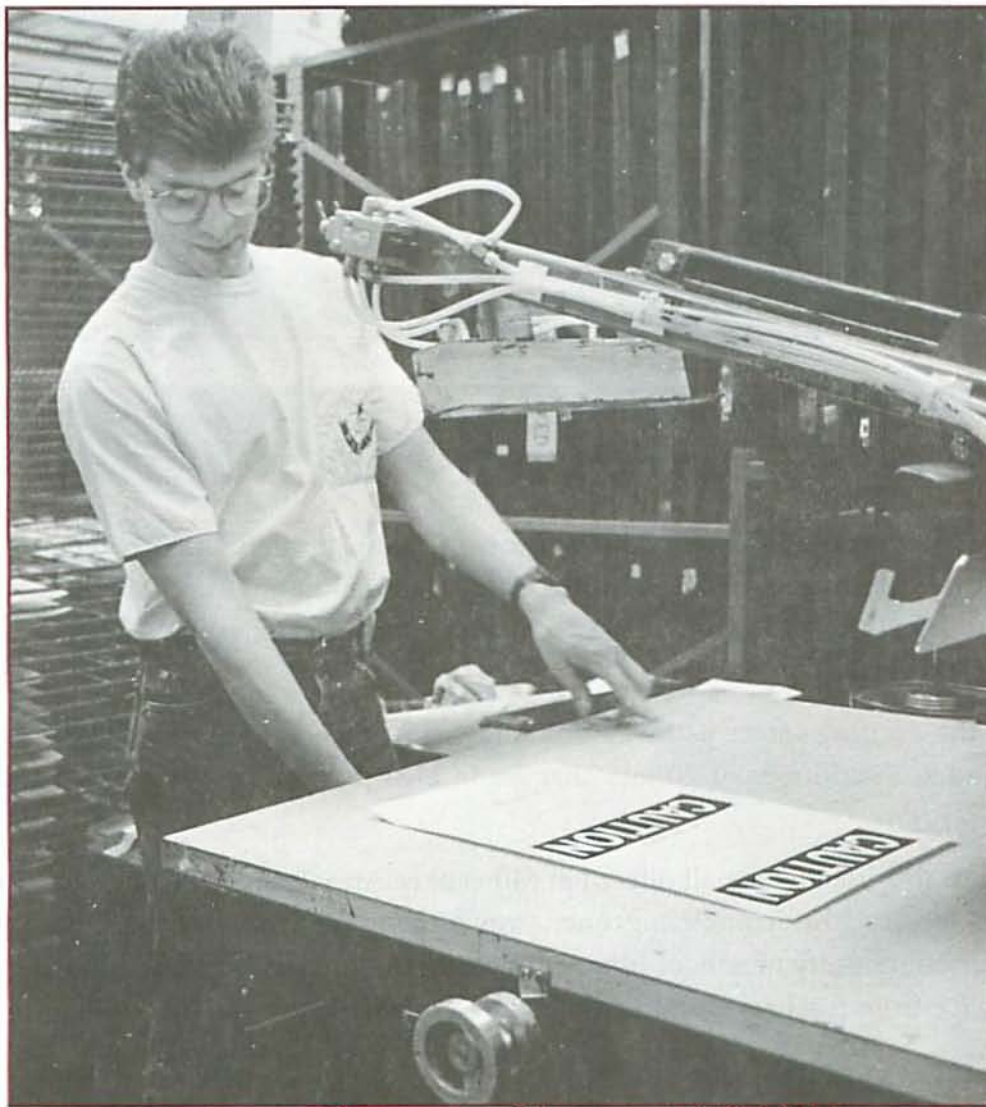
This guide was prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. For more information, contact Lois Quinn, (414) 227-3388.

Partners in the Milwaukee Labor Market Project
City of Milwaukee
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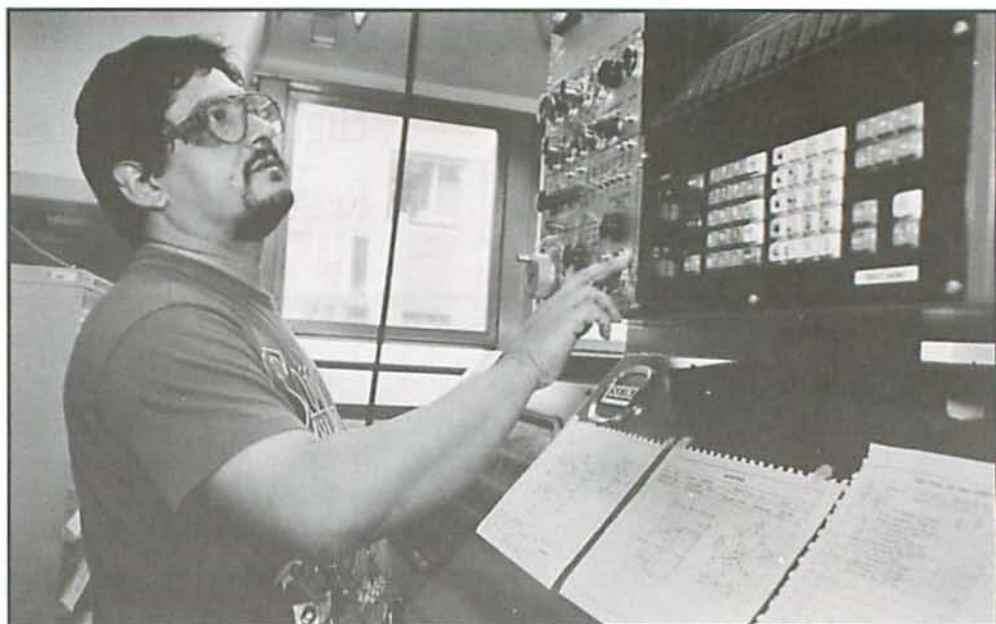
Thinking About the Future:

High Demand Jobs in Technical Fields
Requiring 1-2 Years of College



MILWAUKEE LABOR MARKET PROJECT





High Demand Jobs in Technical Fields

This is an exciting time to think about careers. Many Milwaukee area companies are looking for new workers. Or, if you want to travel, there are jobs available in other cities, states and countries. While it is possible to find employment right out of high school, you will have a greater choice of interesting careers and higher pay if you complete college or technical training.

This booklet describes some of the exciting career pathways for students who complete one semester to two years of college training. It includes descriptions of 20 jobs that are in high demand by Milwaukee area employers.

The college programs described in this booklet are all offered at Milwaukee Area Technical College. You can learn about many other careers for students completing one, two, four or more years of college by contacting local colleges, visiting your community or school library, browsing the Internet, reading local and national newspapers, and seeking advice from teachers and other adults in the labor force.

COMPUTERS AND TECHNOLOGY

<i>Microcomputer Specialist</i>	2
<i>Industrial Engineering Technician</i>	4
<i>Electronic Technician</i>	6



BUSINESS AND MANAGEMENT ▼

<i>Marketing Manager</i>	8
<i>Accountant</i>	10
<i>Environmental Services Manager</i>	12
<i>Retail Manager</i>	14

HEALTH ▼

<i>Medical Assistant</i>	16
<i>Nursing Assistant</i>	16
<i>Phlebotomist</i>	16



SERVICES ▼

<i>Landscape Horticulturist</i>	18
<i>Cook/Chef</i>	20
<i>Automotive Maintenance</i>	22
<i>Cosmetologist/Barber</i>	24
<i>Police Officer/Security Guard</i>	26

MANUFACTURING ▼

<i>Computerized Machining Technician</i>	28
<i>CNC Machine Tool Operator</i>	28
<i>Printing and Publishing Operator</i>	30
<i>Tool and Die Maker</i>	32
<i>Welder</i>	34

Microcomputer Specialist



TRAINING REQUIRED

Microcomputer specialists help develop and maintain computerized information systems for companies and agencies. In a two-year college program, you will learn to create and maintain computer information systems, program in computer language, and to evaluate software applications. You will also learn to operate microcomputers, install computer equipment, and provide training and support for users of computer information systems and networks.

WHAT RECENT GRADUATES EARN

- MATC received 5 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$12.56 an hour (\$26,125 annually). Experienced workers completing the associate degree program are earning \$15.94 an hour (\$33,155 annually).

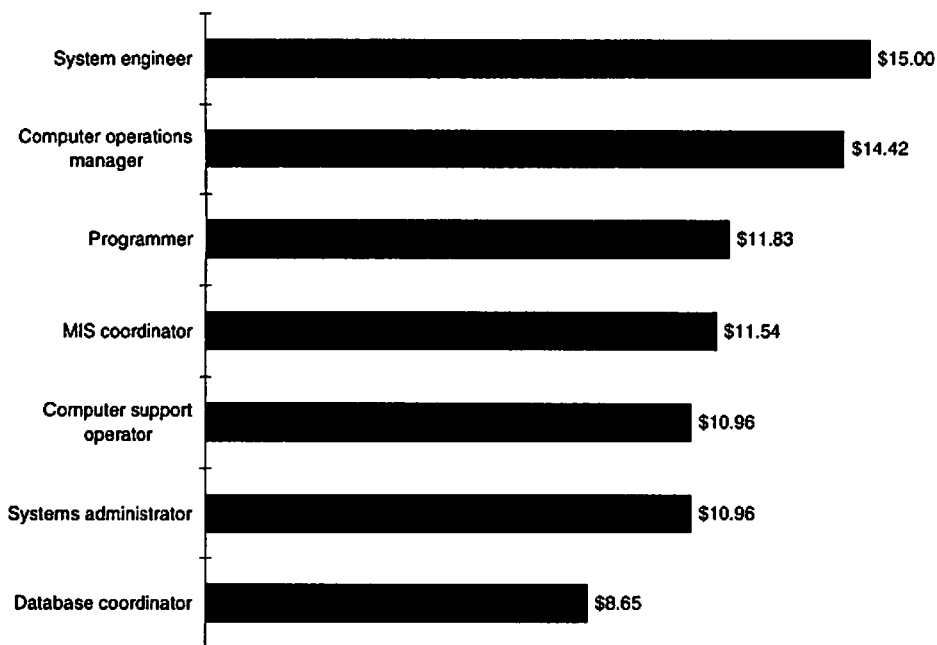
- ✓ *Do you like working with computers?*
- ✓ *Can you think logically and solve problems?*
- ✓ *Are you creative and imaginative?*
- ✓ *Do you work well with others?*
- ✓ *Are you patient and persistent in your work?*

NATIONAL JOB OUTLOOK

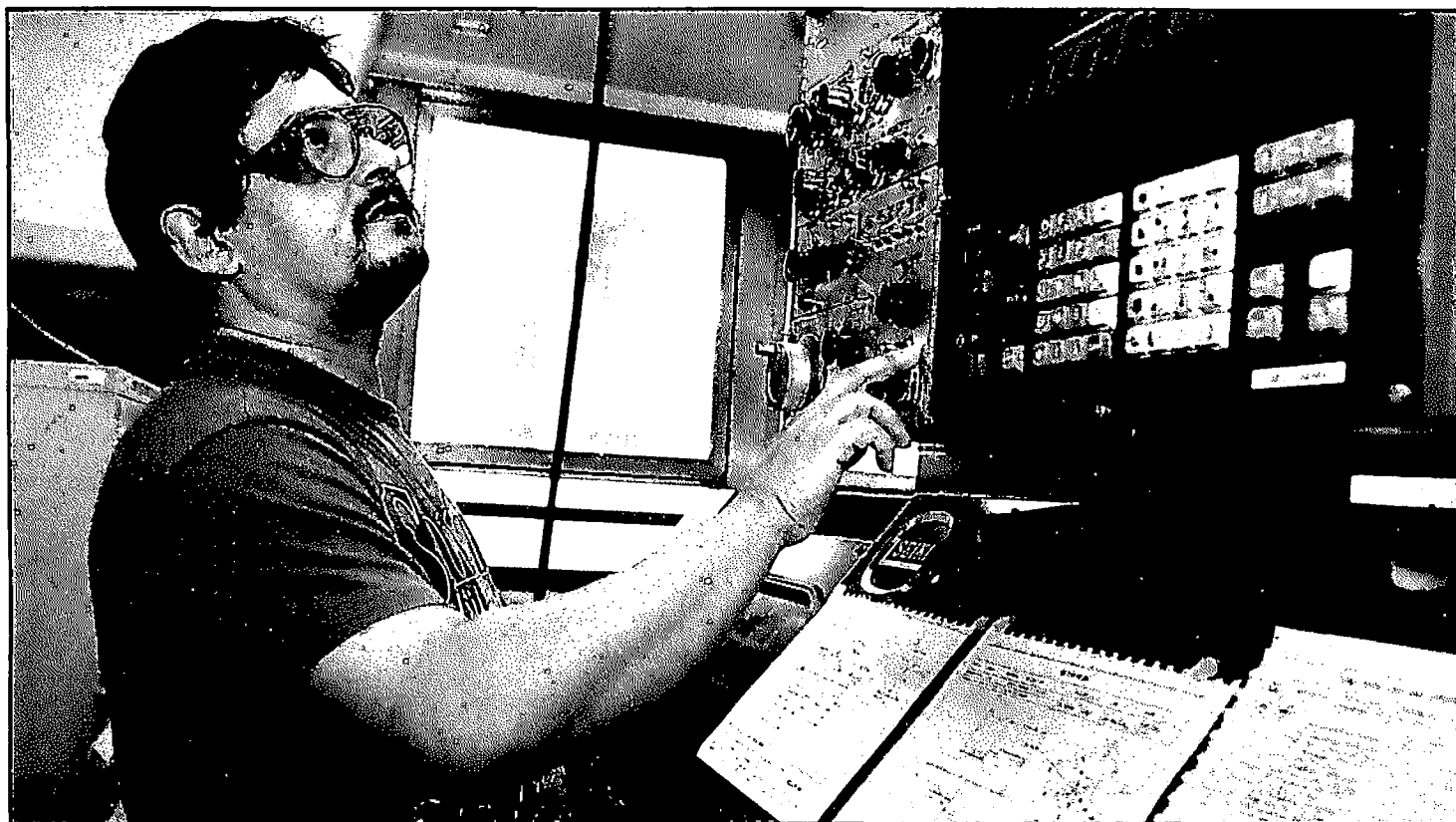
Jobs for computer specialists are expected to grow very rapidly in the next decade. The demand for microcomputer specialists will increase as companies find new uses for computers and ways to improve their software programs. Because of falling prices of computer hardware and software, more smaller businesses are encouraged to use computers. Many companies are developing computer networks to increase sharing of information among their workers. These trends will create more demand for microcomputer specialists.

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Computer Fields



Industrial Engineering Technician



TRAINING REQUIRED

Industrial engineering technicians work with engineers to improve the quality of products. Technicians study the way machines and materials are used in order to reduce costs, increase production, and improve a company's operations. In a two-year college program, you will learn to set up production methods, establish time standards, identify and install cost reduction methods, and do process planning. You will learn to use data to improve plant layouts and to use CNC and CAD equipment.

WHAT RECENT GRADUATES EARN

- MATC received 15 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$13.74 an hour (\$28,579 annually). Experienced workers completing the associate degree program are earning \$14.95 an hour (\$31,096).

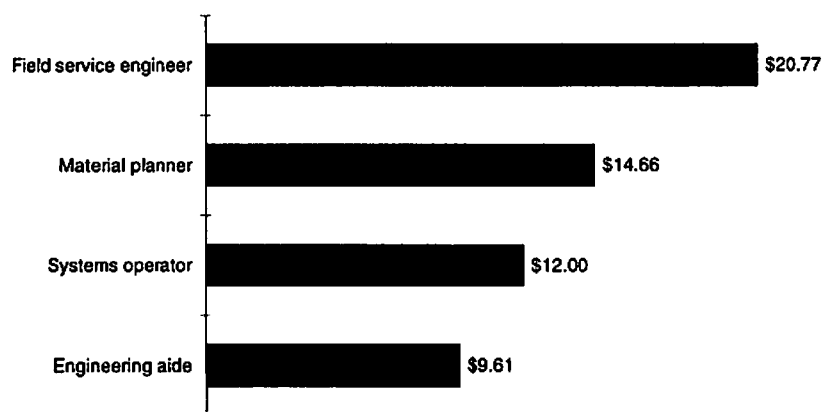
- ✓ *Can you work well in a team?*
- ✓ *Are you good at math and science?*
- ✓ *Can you follow detailed directions?*
- ✓ *Are you good at planning projects and follow-through?*
- ✓ *Do you like to understand how things work?*

NATIONAL JOB OUTLOOK ▼

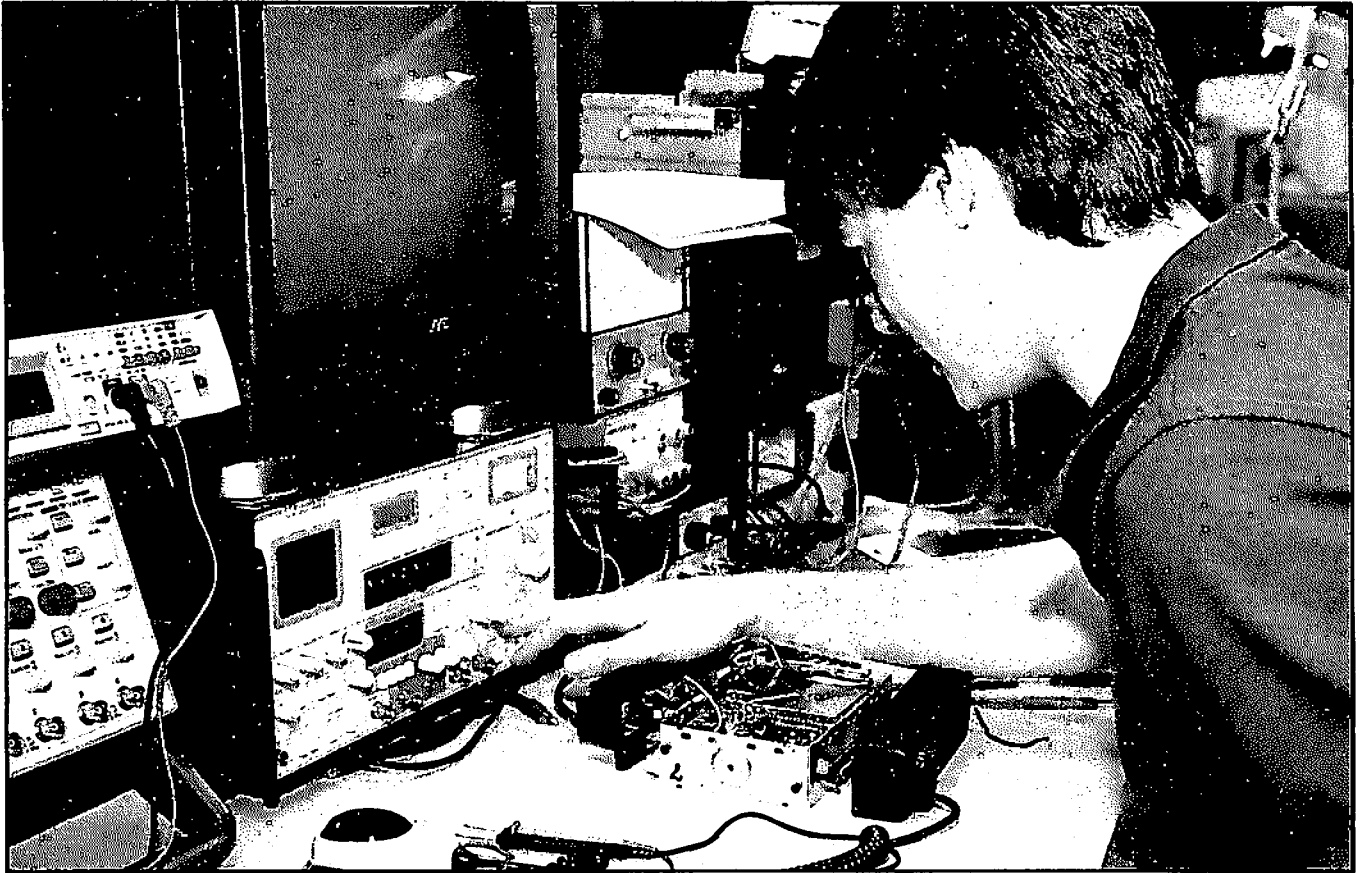
Jobs for industrial engineering technicians will result from workers retiring as well as from demand for new technicians. Industrial engineering technicians will be needed to help companies reduce their production costs and increase outputs to meet global competition. At the same time some work done by technicians may be simplified by computer technology.

MILWAUKEE AREA JOB OPENINGS ▼

Starting Wages in Industrial Engineering



Electronic Technician



TRAINING REQUIRED

Electronic equipment technicians install, test and repair equipment to make sure that it works properly. Two-year college programs are available to prepare you to work in the biomedical, communications or industrial fields. In a biomedical program you will learn how to install, test and repair electronic equipment (such as bedside monitor systems and EKG machines) used in hospitals and medical clinics. If you focus on the communications field, you can learn to test, repair and service equipment for radio and television transmission, cable TV and two-way radios. Or you may chose to learn how to calibrate, troubleshoot and service equipment for industries that use electronic control systems for stand-alone machines.

WHAT RECENT GRADUATES EARN

- MATC received 16 job requests for every associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$11.95 an hour (\$24,856 annually) in the biomedical field, \$11.81 an hour (\$24,565 annually) in communications, and \$12.63 an hour (\$26,270 annually) for industrial electronics technicians.

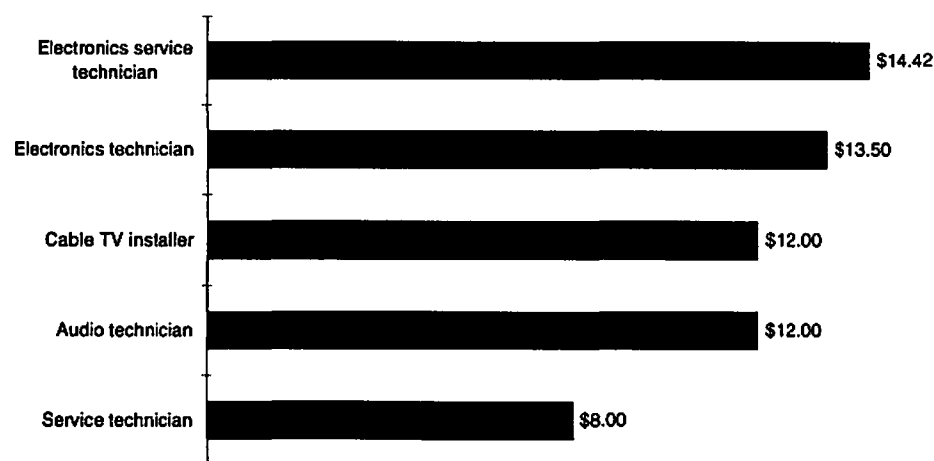
- ✓ *Are you good at figuring out how things work?*
- ✓ *Are you able to work independently?*
- ✓ *Are you interested in new technologies?*
- ✓ *Do you work well with people?*
- ✓ *Do you have good communication skills?*

NATIONAL JOB OUTLOOK

Jobs for biomedical electronic technicians are expected to increase about as fast as average through the next decade. The use of electronic equipment will grow very rapidly, but improvements in the equipment will lessen the need for repairs. Jobs for communications equipment mechanics and broadcast technicians are expected to decline nationally, but local jobs for MATC graduates are in high demand. Jobs for industrial electronics technicians will grow more slowly than average nationally, while demand for MATC graduates in this field continues to be high.

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Electronics



Marketing Manager



TRAINING REQUIRED

Marketing managers help companies develop, price, sell and distribute their products and services. Marketing managers conduct research to find out what people want in a product and design packaging and advertising to make a product more appealing. Sales representatives call on existing clients, promote the sale of company products and services to new clients, and report back on customer needs. In a two-year college program, you will learn the principles of advertising, market research and professional selling.

WHAT RECENT GRADUATES EARN

- MATC received 16 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$9.26 an hour (\$19,261 annually). Experienced workers completing the associate degree program are earning \$13.71 an hour (\$28,517 annually).

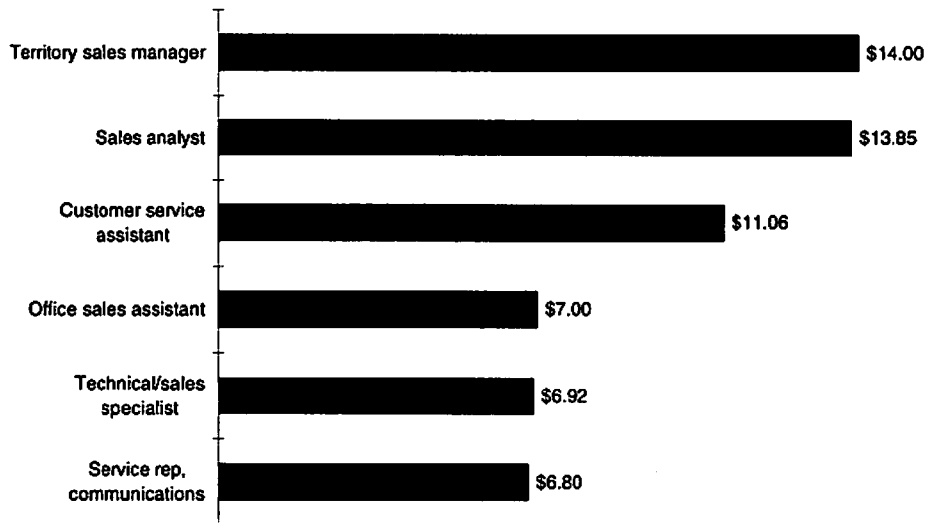
- ✓ *Do you work well as a member of a team?*
- ✓ *Are you creative and imaginative?*
- ✓ *Are you good at planning projects and carrying them out?*
- ✓ *Do you have an out-going personality and good rapport with people?*
- ✓ *Are you well-organized and self-confident?*

NATIONAL JOB OUTLOOK

Jobs for marketing managers are expected to increase faster than average. Companies are using marketing managers to help them meet strong competition in local, national and international markets and to improve services to their customers. Nationally, job growth should be strong in business service industries (like computers and data processing) while average in manufacturing. Competition will continue to be tough for higher level marketing and public relations jobs.

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Marketing





- ✓ *Are you good at math?*
- ✓ *Can you think logically?*
- ✓ *Do you enjoy working with people?*
- ✓ *Do you have good communication skills?*
- ✓ *Are you dependable and trustworthy?*

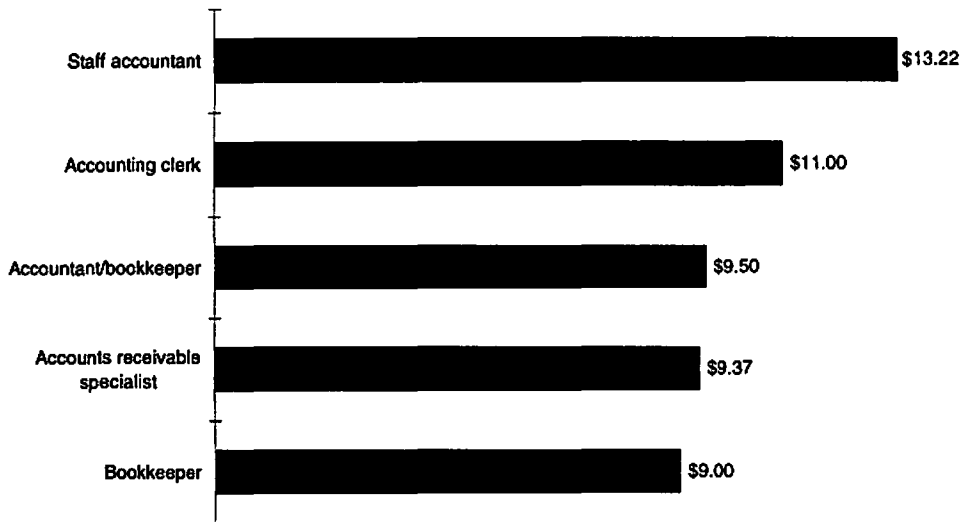
Accountant

TRAINING REQUIRED

Accountants prepare, analyze and check the accuracy of financial reports and tax statements. You will often use computers to maintain accounts and to prepare reports. In a two-year college program you will learn how to maintain accounts receivable and accounts payable, prepare payroll and related reports. You will also learn to collect data for financial reports, prepare tax reports, audit contracts, and work with departmental budgets.

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Accounting



NATIONAL JOB OUTLOOK

Job openings for accountants are expected to grow about as fast as average through the year 2005. Because this occupation is so large, many jobs will be available when accountants retire. As the economy grows and more businesses are started, more companies will need accountants to set up their books, prepare their taxes, manage their payrolls, and provide financial advice. Because computers will be used to prepare more accounting reports, workers need broad computer experience.

WHAT RECENT GRADUATES EARN

- MATC received 2 to 3 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$10.09 an hour (\$20,987 annually). Experienced workers completing the associate degree program are earning \$13.37 an hour (\$27,810 annually).

Environmental Services Manager



TRAINING REQUIRED

Environmental services managers coordinate, schedule, and supervise the activities of janitors, cleaners and housekeepers. They assign tasks and inspect building areas to see that work has been done properly. In a two-year college program you will learn cleaning and housekeeping techniques and proper safety standards. You will also learn how to use materials, supervise staff, and manage costs.

WHAT RECENT GRADUATES EARN

- MATC received 31 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$11.11 an hour (\$23,109 annually).

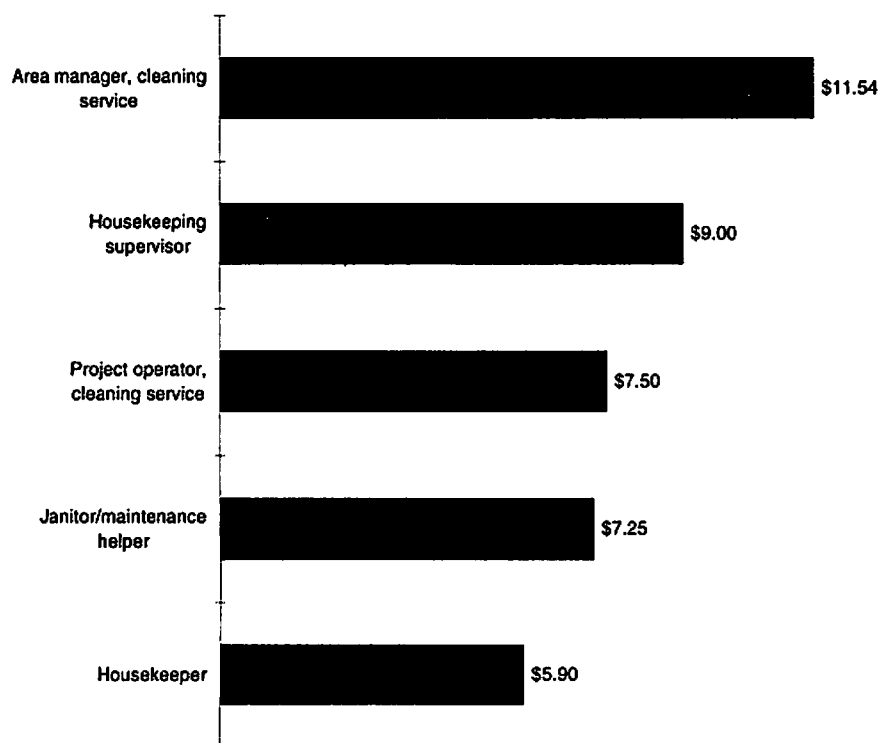
- ✓ *Do you enjoy physical activities?*
- ✓ *Can you handle having a wide range of duties?*
- ✓ *Do you like working with people?*
- ✓ *Are you dependable and hard-working?*
- ✓ *Do you enjoy supervising projects and planning activities?*

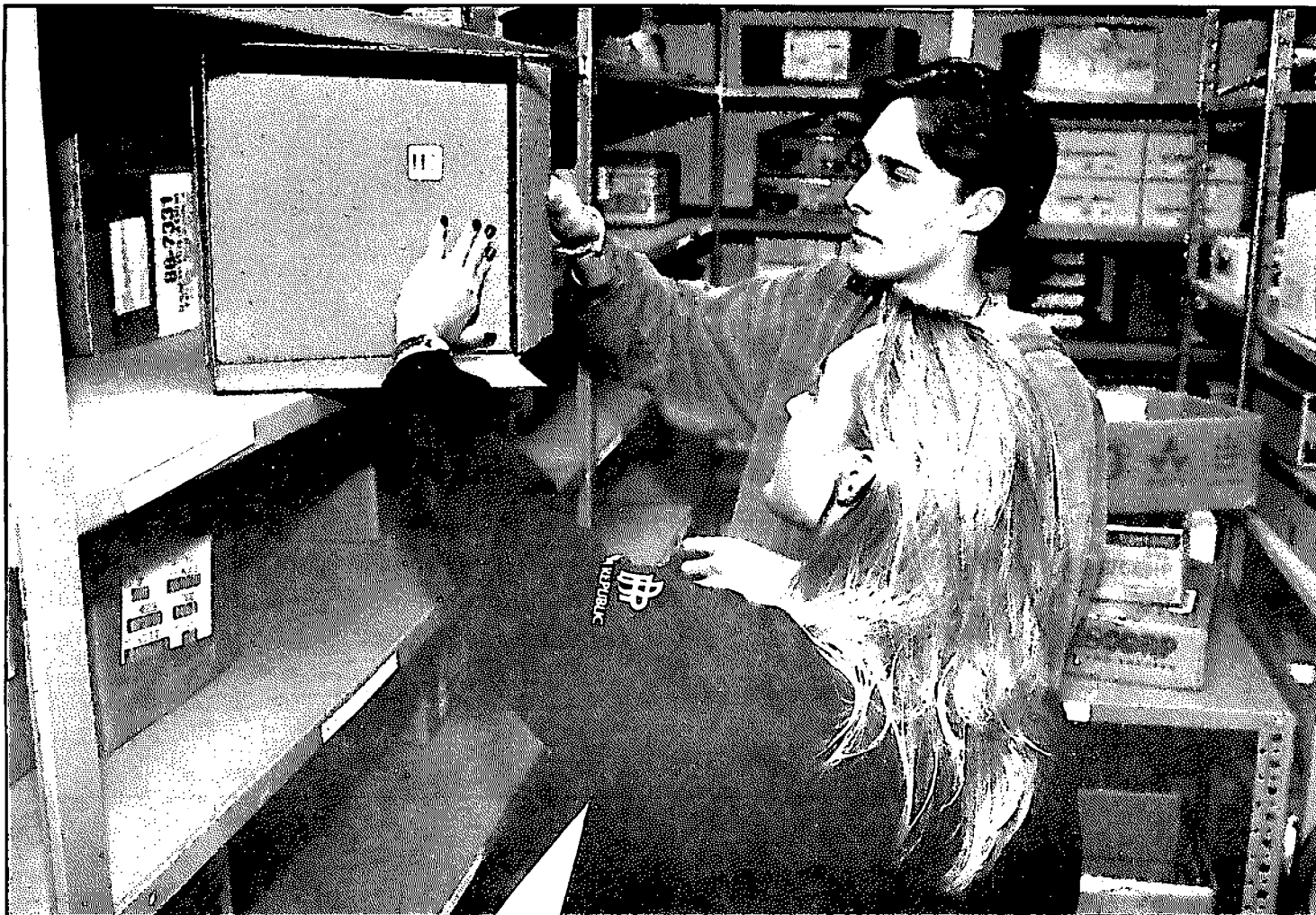
NATIONAL JOB OUTLOOK ▼

Employment of cleaning supervisors is expected to grow as the number of office buildings, apartment houses, schools, factories, hospitals and other buildings increase. Supervisors hold about one job in twenty in the cleaning field and are needed to train and direct staff with high turnover. Businesses providing janitorial and cleaning services on a contract basis are expanding rapidly, as companies look for ways to cut their cleaning costs.

MILWAUKEE AREA JOB OPENINGS ▼

Starting Wages in Cleaning Services





Retail Manager

TRAINING REQUIRED

Retail sales worker supervisors and managers oversee the work of sales staff and clerks, hire and train workers, prepare work schedules, and check to make sure that customers receive good service. In a two-year college program, you will learn about sales markets, pricing products, sales promotions, and how a retail store or fashion-related business is organized and managed.

WHAT RECENT GRADUATE EARN

- MATC received over 50 job requests for each associate degree graduate in 1995.

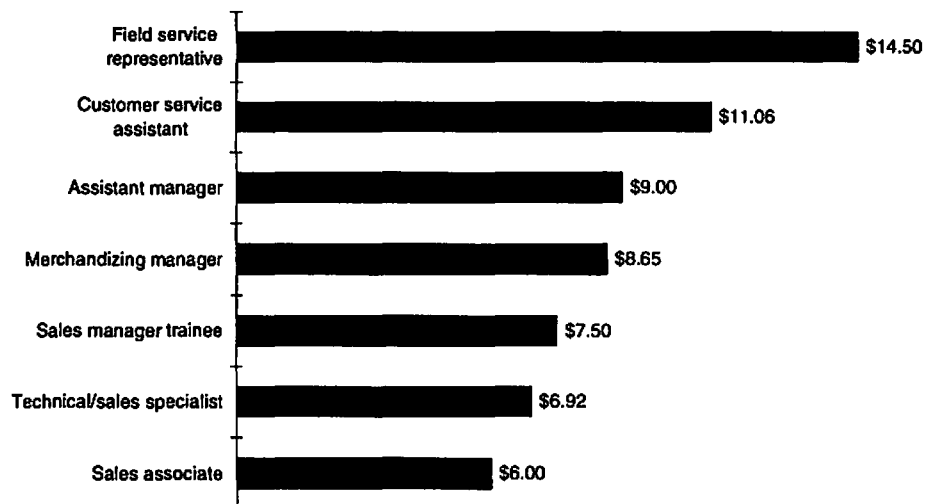
- ✓ *Do you have self-confidence?*
- ✓ *Can you get along well with all kinds of people?*
- ✓ *Do you have leadership skills and take the initiative?*
- ✓ *Can you communicate clearly and persuasively?*
- ✓ *Do you have patience when dealing with others?*

NATIONAL JOB OUTLOOK

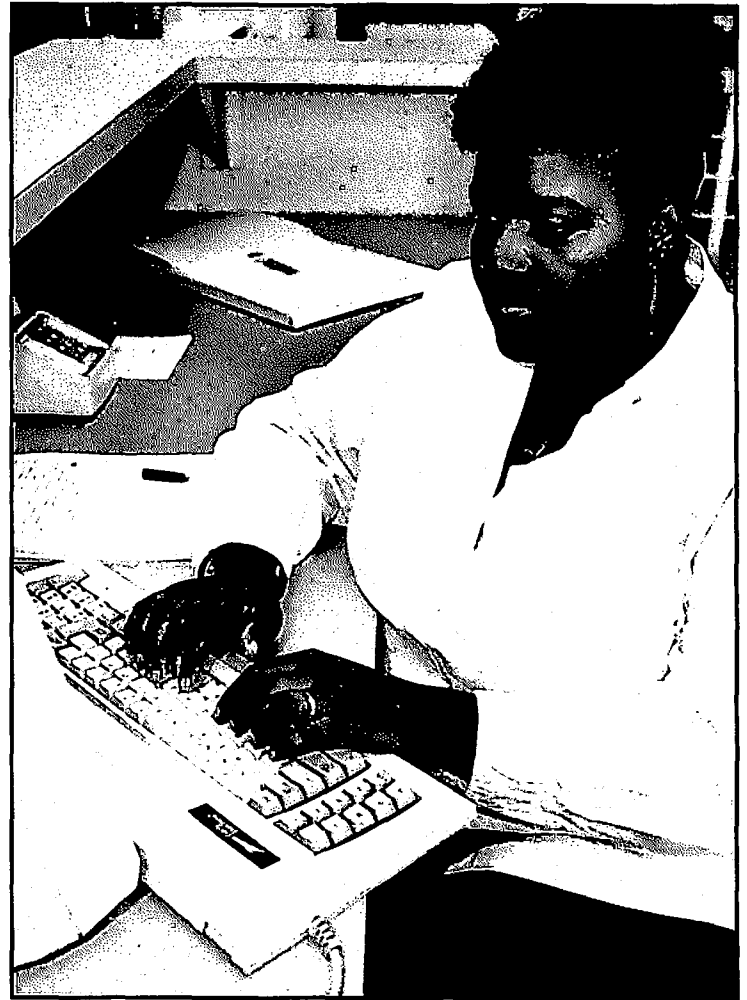
Jobs for retail sales supervisors and managers are expected to grow about as fast as the average for the next decade. Most job openings are expected to occur when supervisors move into higher management jobs, transfer to other jobs or retire. The demand for store-level retail sales worker supervisors and managers will increase due to new product lines and creation of new departments within existing stores.

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Retail Management and Sales



- ✓ *Do you like to help people?*
- ✓ *Are you willing to handle a variety of tasks?*
- ✓ *Can you relate well to others and put them at ease?*
- ✓ *Are you able to handle detail work?*
- ✓ *Are you dependable and reliable?*



Medical Assistant/Phlebotomist/Nursing Assistant

TRAINING REQUIRED

Medical assistants help keep health clinics and doctors' offices running smoothly. You may have office duties, such as answering phones, setting up appointments, updating patient records, and handling bills. You may also have medical duties, such as assisting during exams, collecting lab work, and sterilizing equipment. In a thirty-six week college program, you will learn to take vital signs, perform basic lab tests, work with patients and their families, type accurate medical reports, and use computers for office work.

A phlebotomist draws blood from patients at hospitals, clinics, blood banks and medical laboratories. Phlebotomists are trained to draw blood safely, without exposing the patient or themselves to risks of infection or disease. Phlebotomists collect, label and prepare blood samples for medical lab work. A two-course certificate program in phlebotomy provides you the preparation and certification for this work.

Nursing assistants help care for people who are ill, disabled or elderly. Nursing assistants work under the direction of nursing and medical staff. You may serve meals, make beds, feed and bathe patients, give massages, and take patients' pulse and blood pressure. The six-week technical diploma program teaches you the basic skills and procedures needed to help patients in hospitals and nursing homes, and at home with their daily living activities.

MILWAUKEE AREA JOB OPENINGS ▼

- Milwaukee area job openings for medical assistants were paying \$7.75 to \$8.40 an hour in 1995
- Milwaukee area job openings for certified nursing assistants were paying \$6.50 to \$7.60 an hour in 1995.
- Milwaukee area job openings for phlebotomists were paying \$7.90 an hour.

WHAT RECENT GRADUATES EARN ▼

- MATC received 8 job requests for each medical assistant diploma graduate and 3 to 4 job requests for each nursing assistant diploma graduate in 1995.
- Average starting wages are \$8.46 an hour for MATC medical assistant diploma graduates and \$6.68 an hour for MATC nursing assistant diploma graduates.

NATIONAL JOB OUTLOOK ▼

These jobs are expected to grow much faster than average. Workers will be needed to care for the growing elderly population and for people surviving accidents and illnesses due to new medical technology. Because of the high turnover in the medical assistants field, health care offices, clinics and hospitals will be most interested in hiring workers with formal training or experience. Workers in the nursing care field will also need more training if they want to advance to better jobs and higher pay.

- ✓ *Do you enjoy working outdoors?*
- ✓ *Are you able to work independently on your own projects?*
- ✓ *Do you get along well with people?*
- ✓ *Do you have good verbal communications skills?*
- ✓ *Are you interested in environmental issues?*



Landscape Horticulturist

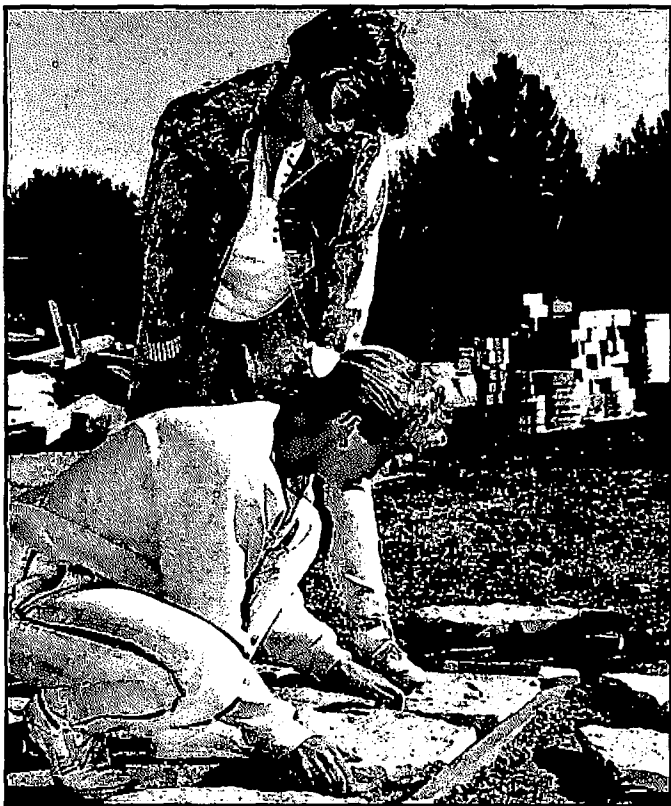
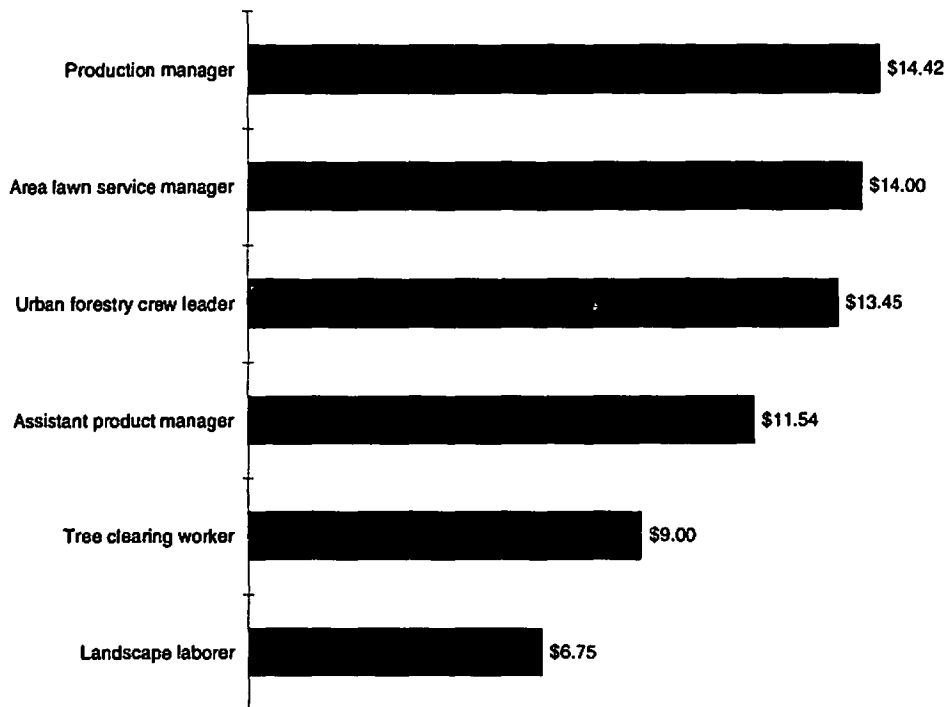
TRAINING REQUIRED

Landscape horticulturists care for plants, design and install landscapes for businesses and homes, and maintain garden centers. In a two-year college program, you will learn how to design landscapes, install plant materials, diagnose plant problems, operate equipment, develop landscape maintenance, and develop cost estimates.

WHAT RECENT GRADUATES EARN

- MATC received 12 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$9.49 an hour (\$19,739 annually). Experienced workers completing the associate degree program are earning \$10.43 an hour (\$21,694 annually).

Starting Wages in Horticulture



NATIONAL JOB OUTLOOK

Jobs for workers with horticultural training are expected to grow as fast as average in the next decade. There will be work available on commercial, residential, and recreational properties. There will also be demand for workers in garden centers and for salespersons with companies that sell landscape and horticulture products. A growing number of home owners are using lawn maintenance and landscaping services to increase the beauty and value of their property. Many jobs are seasonal, however, and there is high turnover as workers move into other fields.

- ✓ Do you enjoy cooking?
- ✓ Can you work well as part of a team?
- ✓ Are you good at planning and coordinating tasks?
- ✓ Do you take pride in your work?
- ✓ Would you enjoy supervising other workers?



Cook/Chef

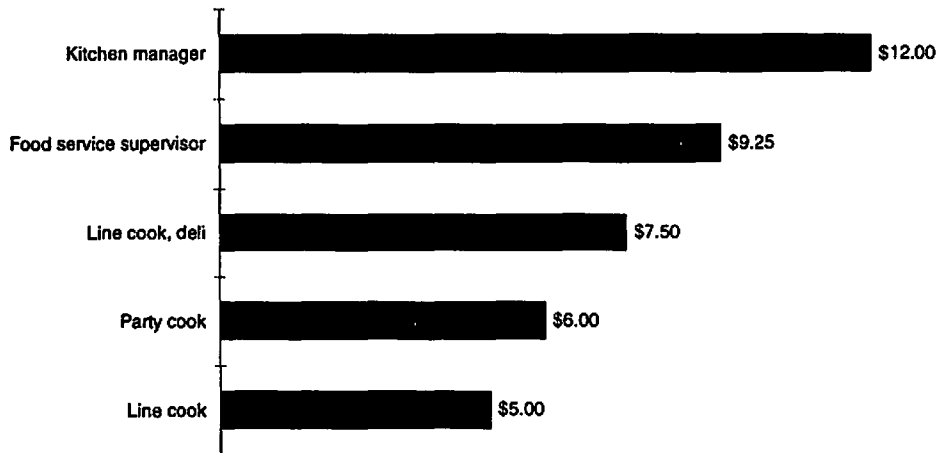
TRAINING REQUIRED

Cooks and chefs are responsible for preparing nutritious and attractive meals for restaurants, schools, and other institutions. In a two-year college program in culinary arts, you will learn to prepare basic and specialized foods. You will learn about dining room service, wines and other beverages, menu planning and nutrition. You will also learn how to cater events and how to control costs of food and beverage purchases and labor.

WHAT RECENT GRADUATES EARN

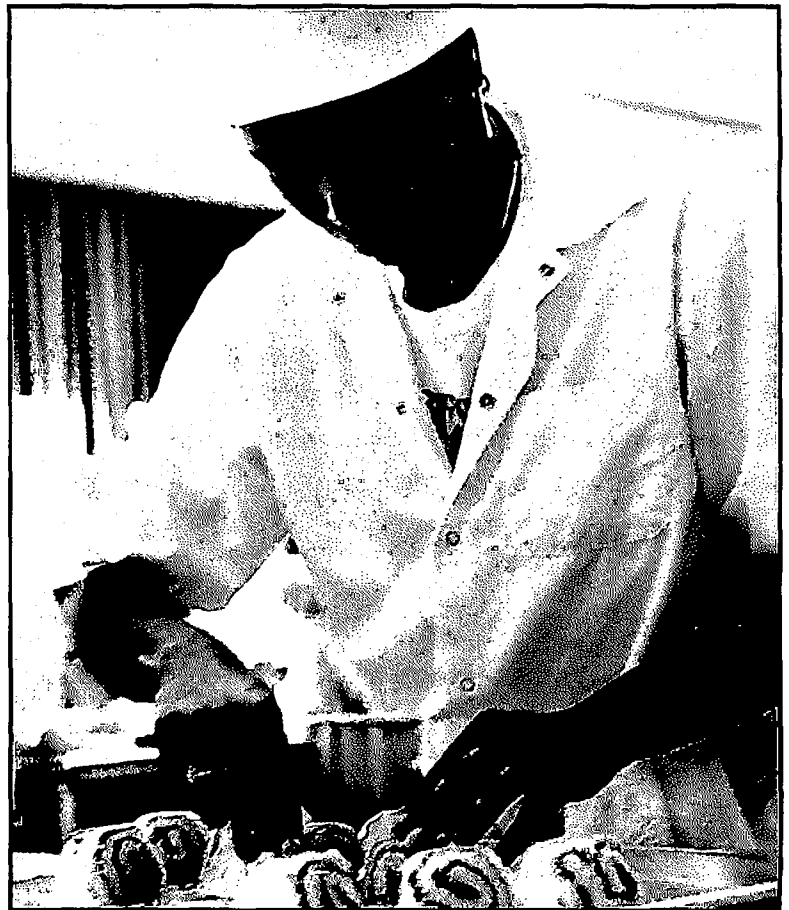
- MATC received 13 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$9.23 an hour (\$19,198 annually).

Starting Wages in Cooking Fields

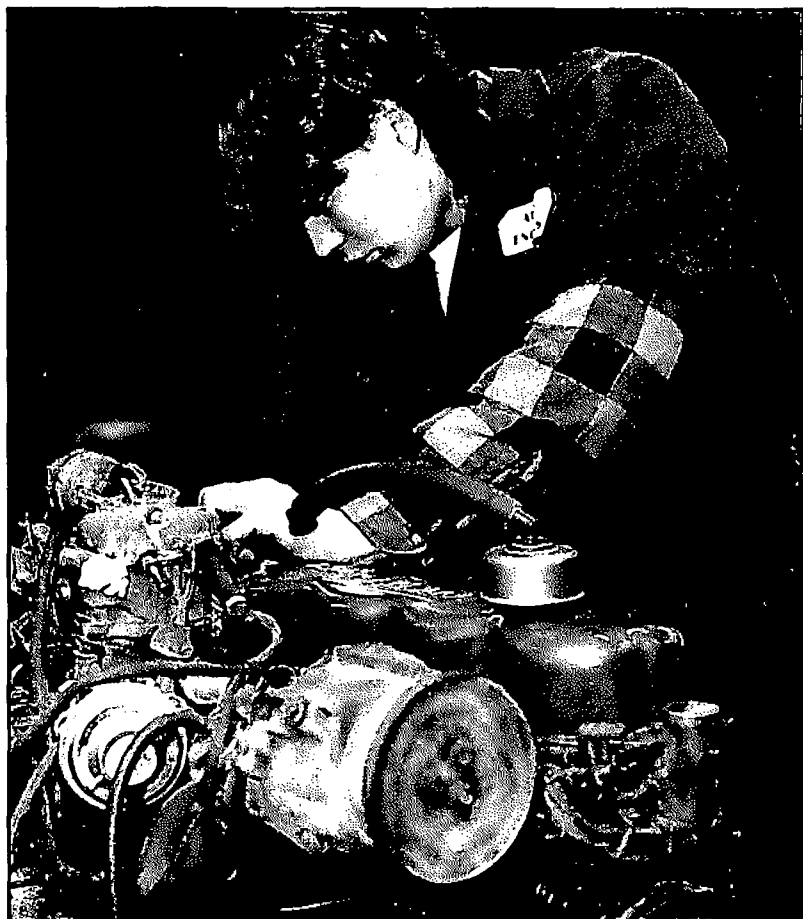


NATIONAL JOB OUTLOOK

Jobs for chefs, cooks, and other kitchen workers are expected to be plentiful through the year 2005. Job openings in restaurants will increase because of the aging of the population and rising household incomes. Increases in leisure time will allow many people to dine out more often and to take more vacations.



- ✓ *Do you have mechanical aptitude?*
- ✓ *Do you have good reading and basic math skills?*
- ✓ *Do you understand how cars work?*
- ✓ *Are you willing to learn new repair and service procedures?*
- ✓ *Are you interested in keeping up with new technology?*



Automotive Maintenance Technician

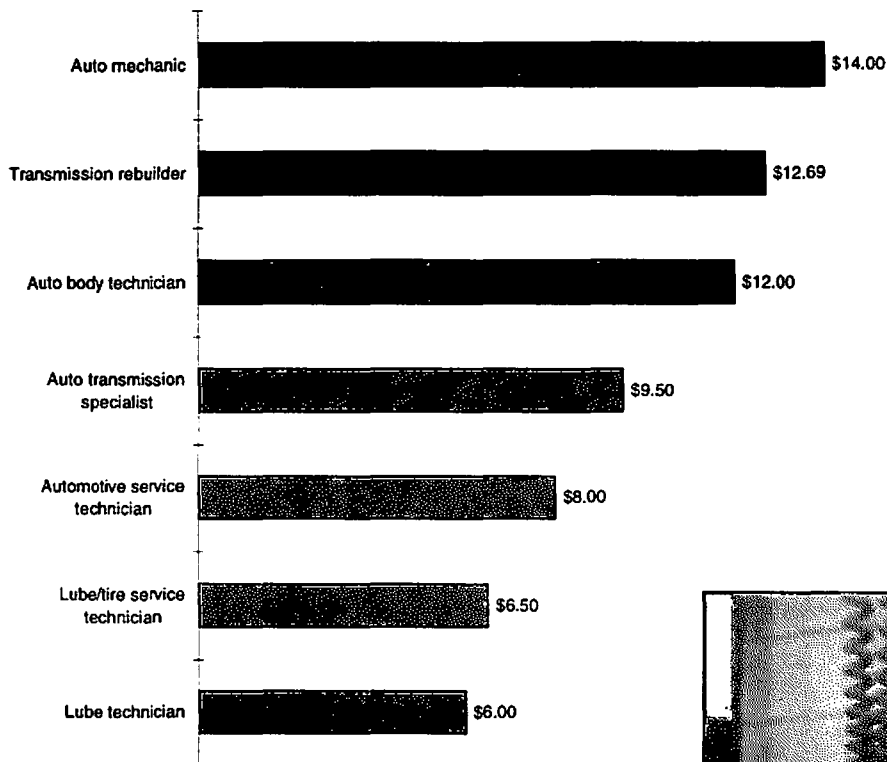
TRAINING REQUIRED

Automotive maintenance technicians repair passenger cars and light trucks. In a one-year college program you will learn to do lubrication, wheel alignment and balancing, repair of electrical systems, engine repairs, engine tuneups, and automatic transmission repair. You may want to take additional training to learn about computerized engine controls and computer controlled fuel delivery systems.

WHAT RECENT GRADUATES EARN

- MATC received 11 job requests for each technical diploma graduate in 1995.
- Average starting wages for MATC technical diploma graduates are \$7.50 an hour (\$15,600 annually). Wages for experienced workers completing the two-year associate degree program in automotive technology are \$13.18 an hour (\$27,414 annually).

Starting Wages in the Automotive Field



NATIONAL JOB OUTLOOK

Employment is expected to increase about as fast as the average for all occupations through the year 2005. Jobs will grow in auto dealerships, independent repair shops, and specialty car chains. There will be fewer jobs in gasoline service stations, which are offering less service and repair work. Still, the number of mechanics should increase because of the increased number of teens and adults of driving age on the road. If your training includes some basic electronics, you should have the best opportunities. Persons without formal mechanic training are likely to have a harder time finding entry level jobs.



- ✓ *Do you keep up with the latest fashions?*
- ✓ *Do you have a good sense of style?*
- ✓ *Do you enjoy dealing with people and helping them look good?*
- ✓ *Are you good at styling hair?*
- ✓ *Are you interested in one day running your own business?*



Cosmetologist/Barber

TRAINING REQUIRED

Barbers and cosmetologists cut, trim, shampoo and style hair. You may straighten or wave hair, change hair color, give scalp and facial treatments, or provide make-up advice. In a one-year college program you will learn to do hair cutting and styling, facial and scalp massages, and manicures. You will also learn the basics of business record keeping, how to manage a salon, and how to select the right styling aids, equipment and tools.

WHAT RECENT GRADUATES EARN

- MATC received 3 job requests for each technical diploma graduate in 1995.
- Average starting wages for MATC technical diploma graduates are \$5.57 an hour (\$11,585 annually).

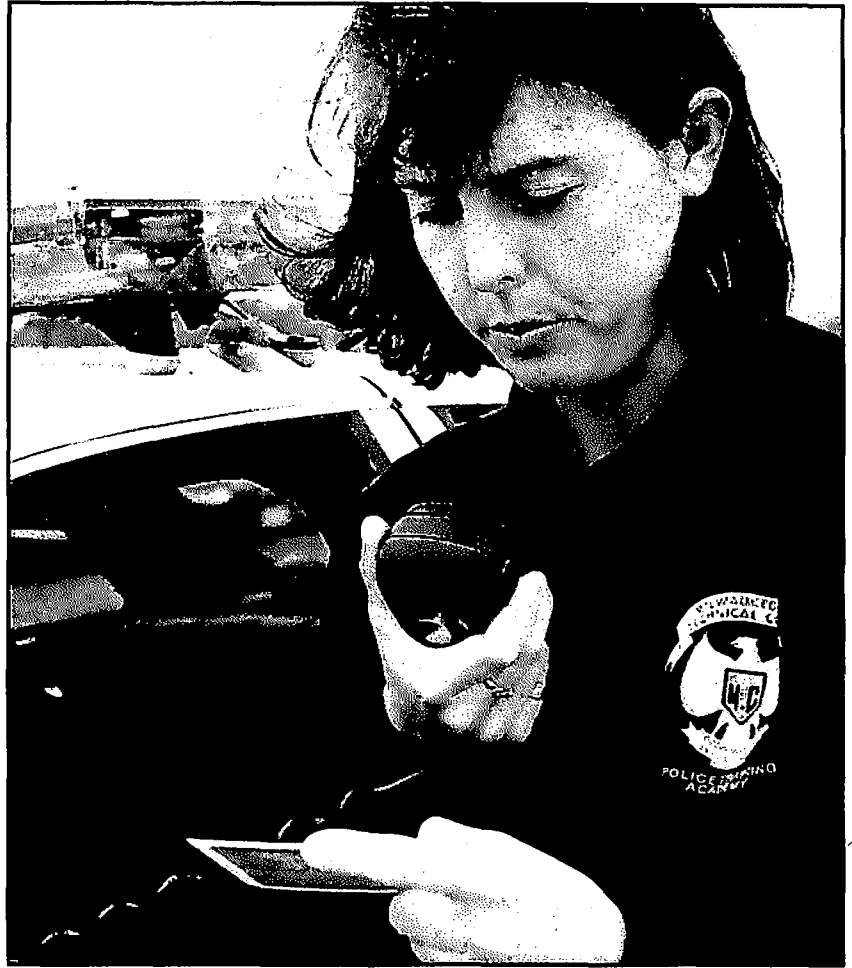
Starting Wages in Cosmetology and Barbering



NATIONAL JOB OUTLOOK

Employment of barbers and cosmetologists is expected to grow about as fast as average through the next decade. The demand for workers will increase because of population growth, rising incomes, and a growing demand for services. Jobs for barbers are expected to go down slightly as more people use full-service, unisex salons staffed by cosmetologists. Demand for manicurists will be very strong.

- ✓ *Do you get along well with people?*
- ✓ *Are you strong and physically fit?*
- ✓ *Are you dependable and trustworthy?*
- ✓ *Can you stay calm under pressure?*
- ✓ *Are you able to handle responsibility and exercise good judgement?*



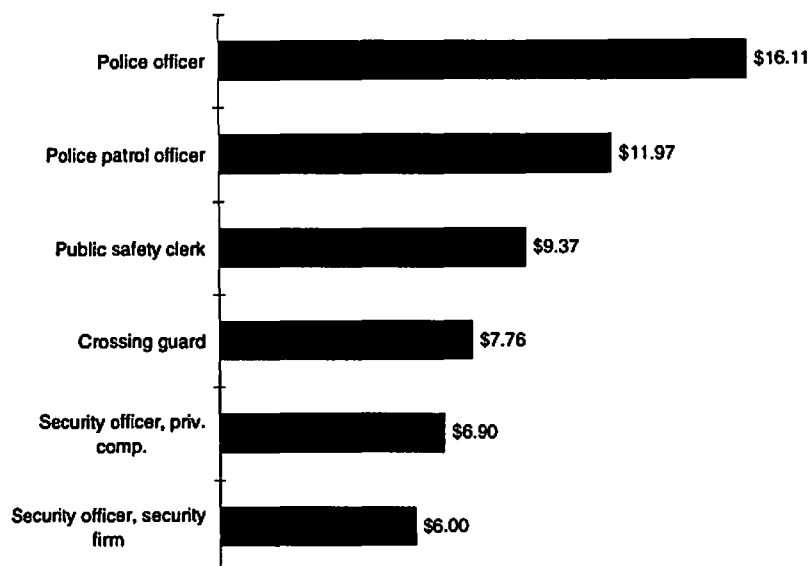
Police Officer/Security Guard

TRAINING REQUIRED

Police officers and security guards protect people and property and maintain order. Security guards patrol and inspect property to protect against fire, theft, vandalism, and illegal entry. Police officers enforce the laws, control traffic, and work to investigate and prevent crimes. In a two-year college program, you will learn to develop skills for the safe use of firearms, equipment and vehicles. You will also learn to prepare departmental reports, understand legal procedures and the criminal justice system, and to react calmly in emergency situations.

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Police and Security Work



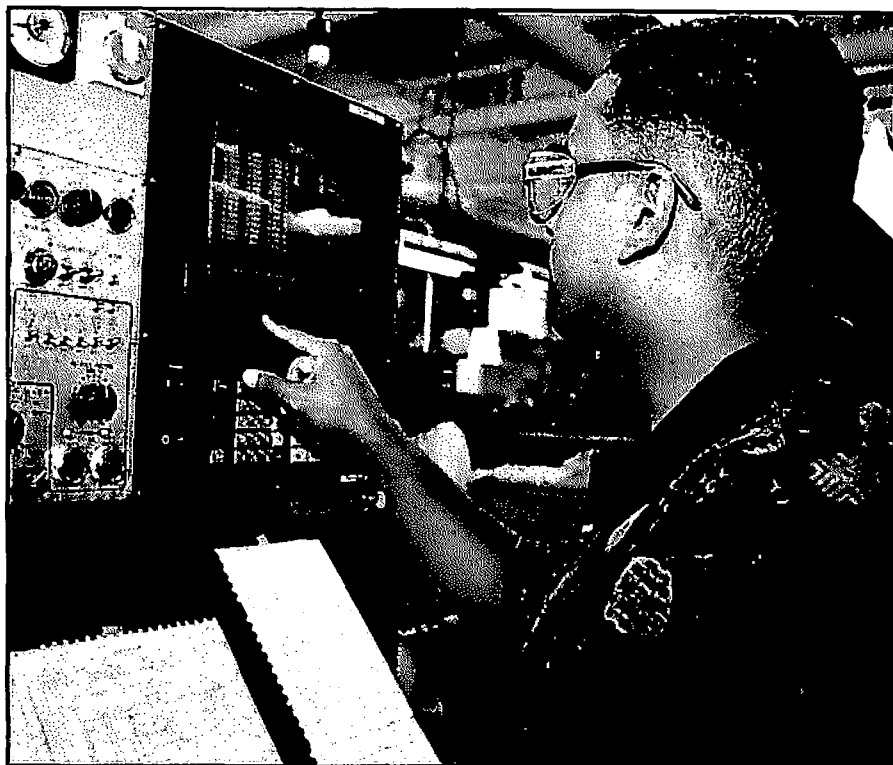
NATIONAL JOB OUTLOOK

Jobs for police officers and security guards are expected to grow faster than average in the next decade. Since crime is a major concern, many communities are increasing the number of police officers. Jobs for private security guards are in high demand, but these jobs have high turnover and are often part-time. Security jobs as guards, night security or building security for individual companies often pay better and are more permanent than employment with security firms. Competition may remain high for police work because of its relatively attractive salaries and benefits.

WHAT RECENT GRADUATES EARN

- MATC received 4 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$10.95 an hour (\$22,776 annually). Experienced workers completing the associate degree program are earning \$12.71 an hour (\$26,437 annually).

- ✓ Do you like working with computers?
- ✓ Do you have good math and reading skills?
- ✓ Are you willing to learn about new technology?
- ✓ Do you like working with machinery?
- ✓ Are you good at problem-solving?



Computerized Machining Technician/CNC Machine Tool Operator

TRAINING REQUIRED

Computerized machining technicians operate and program the equipment used for machining, material handling and inspection work in manufacturing. In a two-year college program, you will learn to operate machining centers and turning centers, program industrial-type machine tools, operate coordinate measuring devices, use the computer to design production parts, and order tooling and fixturing supplies.

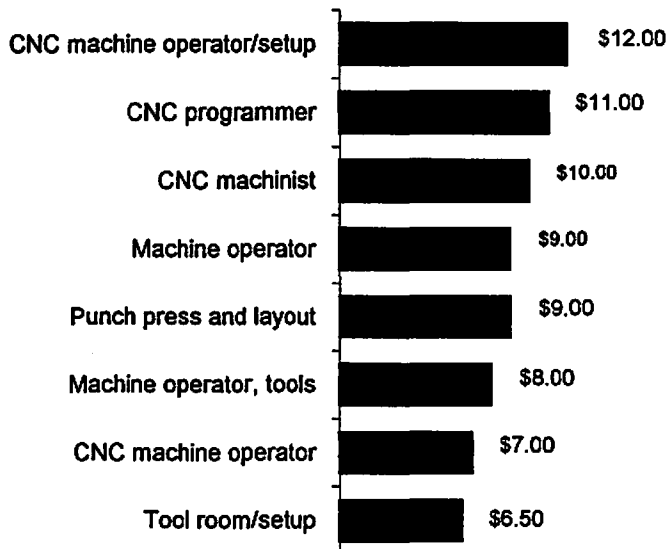
CNC machine tool operators work for manufacturing companies using computer numerically controlled (CNC) machines which must be set up and used properly. Operators are given programs which they load into the controller. They also position the workpiece, attach the necessary tools, and check the coolants and lubricants. In a one-year college program, you will learn to set up, operate and interpret the CNC programs of the machine tools. These machines perform manufacturing processes, such as turning, milling, drilling, threading, or contouring.

WHAT RECENT GRADUATES EARN

- MATC received 20 job requests for each associate degree graduate and 40 job requests for each technical diploma graduate in 1995.
- Starting wages for MATC graduates ranged from \$8.60 to \$18.26 an hour in 1995.

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Machine Tool

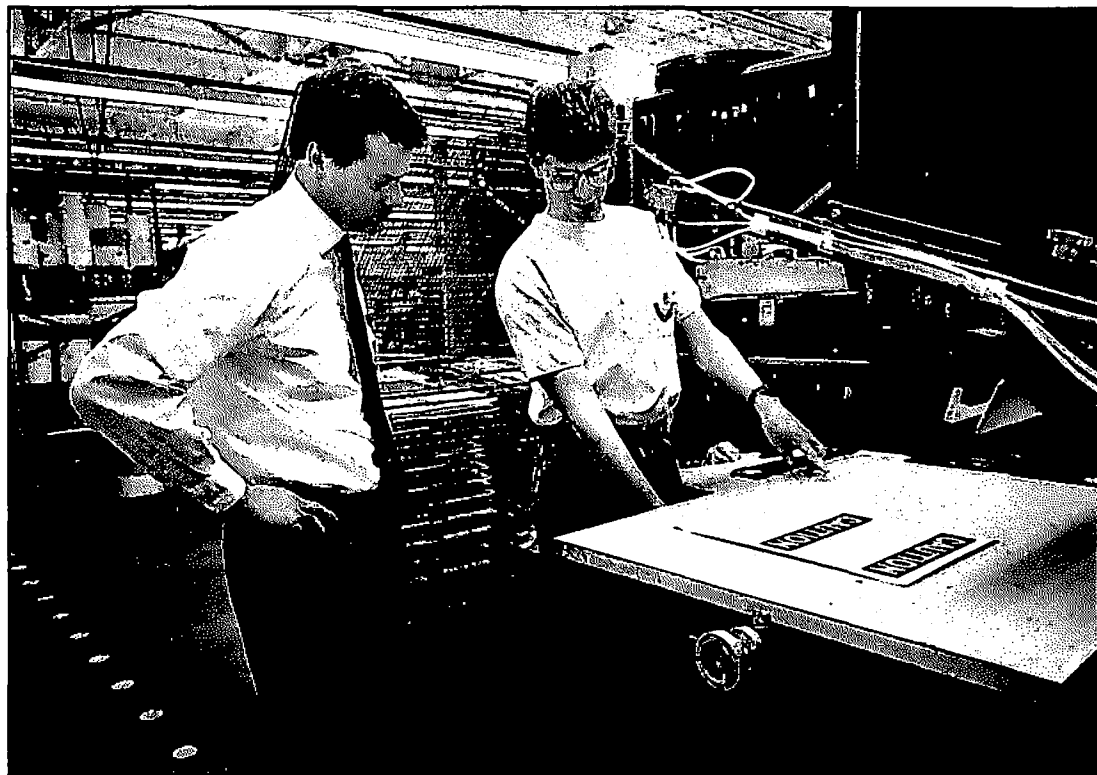


NATIONAL JOB OUTLOOK

Employment of computerized machining technicians and CNC (computer numerical control) operators is expected to increase. Although the number of machine operators across the nation is expected to decline, companies are making more use of CNC equipment. This allows operators to run a greater number of machines at the same time and often makes setup work easier. Jobs for setters and set up operators will increase because they require higher skills and are less easily automated.



Printing and Publishing Operator



TRAINING REQUIRED

There are a wide range of jobs available in printing and publishing fields. In a two-year college program, you will gain skills in basic computer operations, typesetting and electronic publishing, and image assembly. You will learn about proofing and platemaking, reproduction of black and white photographs, color separation, offset presses and operation, finishing operations, and customer service and production management.

WHAT RECENT GRADUATES EARN

- MATC received 13 job requests for each associate degree graduate in 1995.
- Average starting wages for MATC associate degree graduates are \$10.44 an hour (\$21,715 annually). Experienced workers completing the associate degree program are earning \$15.17 an hour (\$31,554 annually).

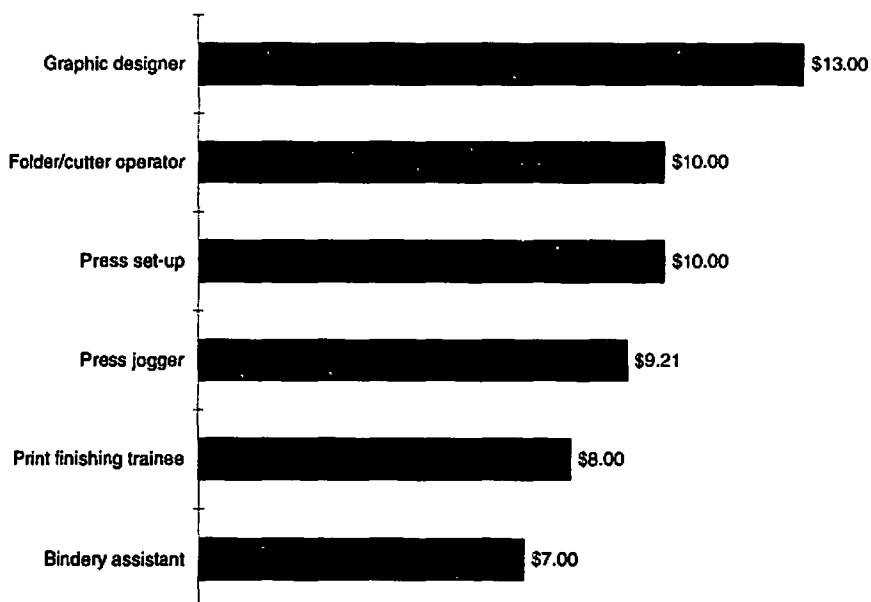
- ✓ *Do you have artistic ability?*
- ✓ *Do you have good math and communication skills?*
- ✓ *Do you enjoy working in a team?*
- ✓ *Are you good at planning projects and completing them?*
- ✓ *Can you work under pressure to meet deadlines?*

NATIONAL JOB OUTLOOK

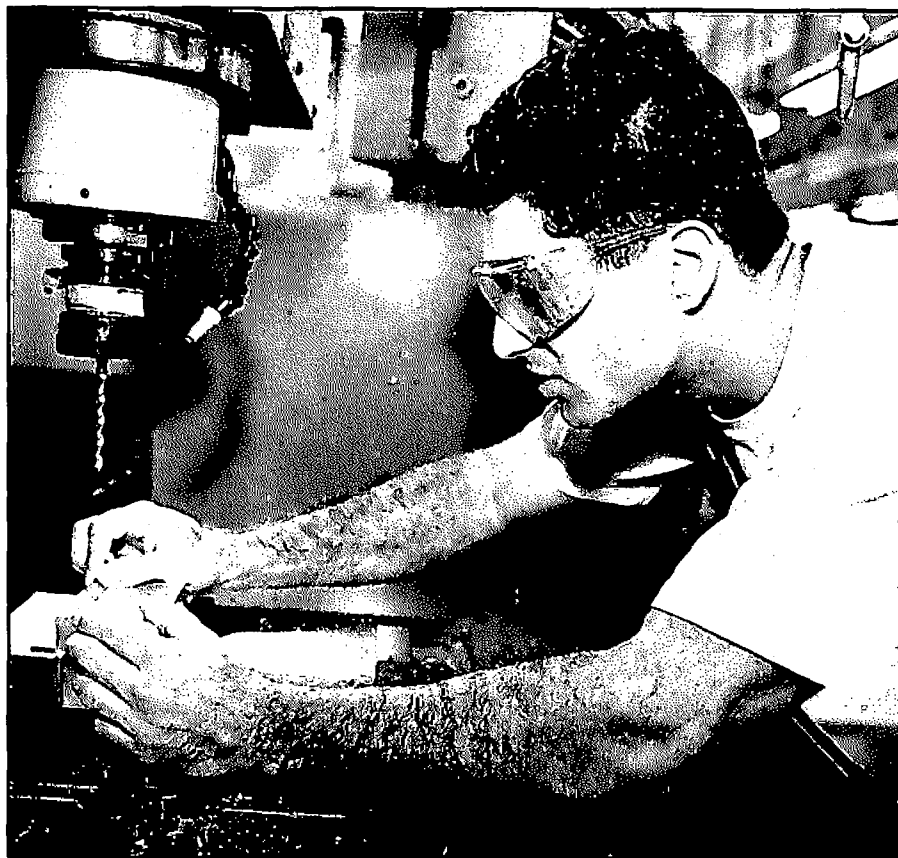
Nationally, employment in this field is expected to grow more slowly than average in the next decade. The demand for printed materials will continue to grow, but computerized printing presses require fewer workers. Workers who keep up with computer advances and automated production machinery will remain in high demand. The printing industry is very strong in the Milwaukee area, where more jobs are available.

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Printing and Publishing



- ✓ *Do you have mechanical aptitude?*
- ✓ *Are you good at math?*
- ✓ *Are you patient and attentive to details?*
- ✓ *Do you like handling responsibility on your own?*
- ✓ *Are you willing to keep learning new technologies?*



Tool and Die Maker

TRAINING REQUIRED

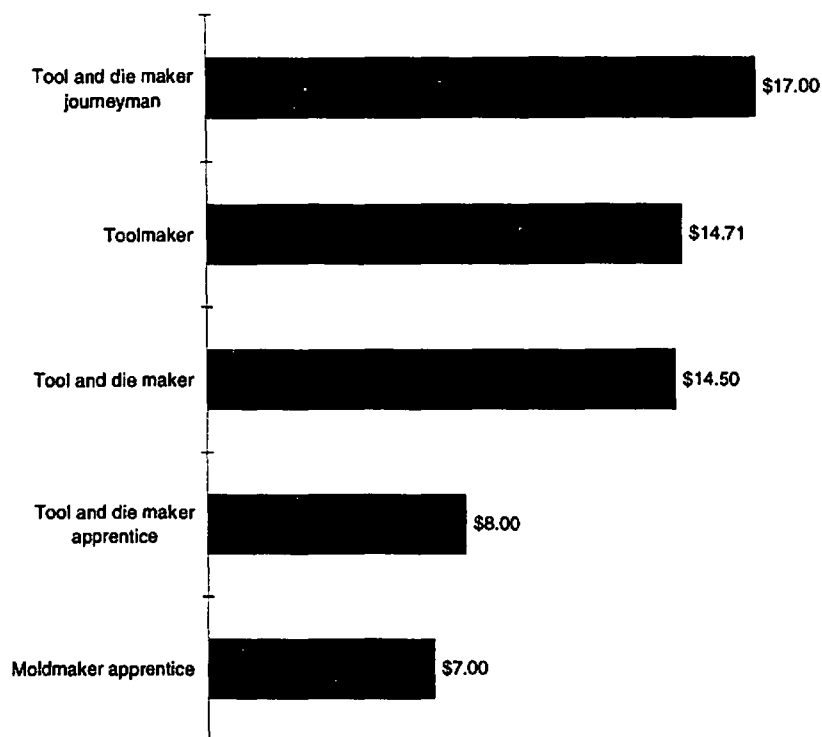
Tool and die makers produce tools, dies, molds and other specialized metal devices that are used to form, hold, cut or shape metals in the manufacturing process. Tool and die makers need a broad knowledge of machining operations and must be familiar with the qualities of various metals they use. In a two-year college program you will learn to use basic tool room machines and to interpret engineering drawings. You will also learn to perform math computations for tool room applications and to understand computer numerical control (CNC) programming.

WHAT RECENT GRADUATES EARN

- MATC received 4 job requests for each technical diploma graduate in 1995.
- Average starting wages for MATC technical diploma graduates are \$10.76 an hour (\$22,381 annually).

MILWAUKEE AREA JOB OPENINGS

Starting Wages in Machine Tool Operation



NATIONAL JOB OUTLOOK

Like machine tool operators, the overall number of workers employed as tool and die makers is expected to decline over the next decade. However, the current workforce of tool and die makers includes a large number of people over age fifty who will soon be retiring. In addition, younger workers have not been entering this trade at nearly the level of workers needed. Qualified new tool and die makers will find excellent employment opportunities, particularly in the Milwaukee area.

Welder



TRAINING REQUIRED

Welders use many different types of equipment to join or cut metal. Welding involves heating, joining, and fusing metal. In a two-semester college program, you will learn to set up and operate welding equipment, read blueprints, and help maintain welding equipment for manufacturing and construction industries.

WHAT RECENT GRADUATES EARN

- MATC received 31 job requests for each technical diploma graduate in 1995.
- Average starting wages for MATC technical diploma graduates are \$10.59 an hour (\$22,027 annually). MATC graduates of the two-year associate degree program in welding technology earn starting wages of \$16.55 an hour (\$34,424 annually).

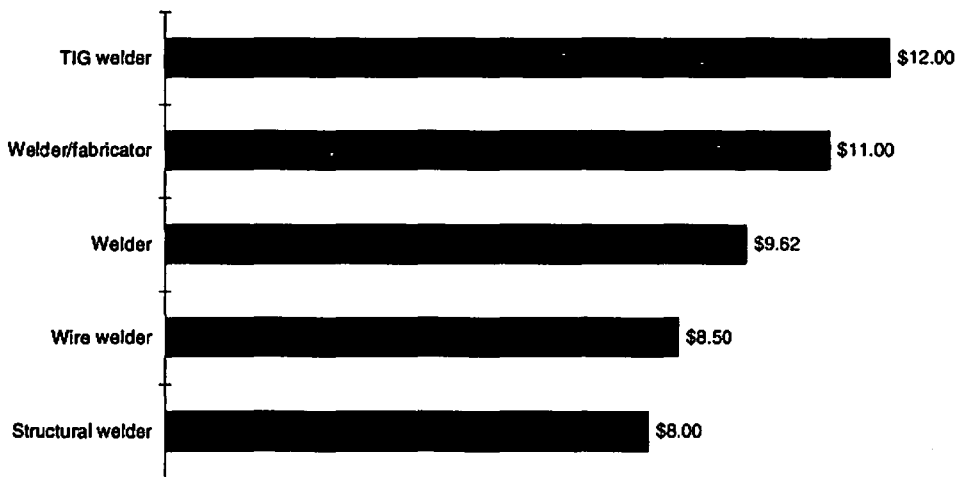
- ✓ *Do you like to work with your hands?*
- ✓ *Do you have good hand-eye coordination?*
- ✓ *Are able to follow directions well?*
- ✓ *Can you concentrate on detailed work?*
- ✓ *Do you enjoy working independently?*

NATIONAL JOB OUTLOOK ▼

Nationwide jobs for welders, cutters and welding machine operators are expected to decline. However, due to replacement needs these jobs are in demand in the Milwaukee area. While many welding jobs will be eliminated by automated systems, manual welders with a wide variety of skills will still be needed for maintenance, repair and other work in manufacturing.

MILWAUKEE AREA JOB OPENINGS ▼

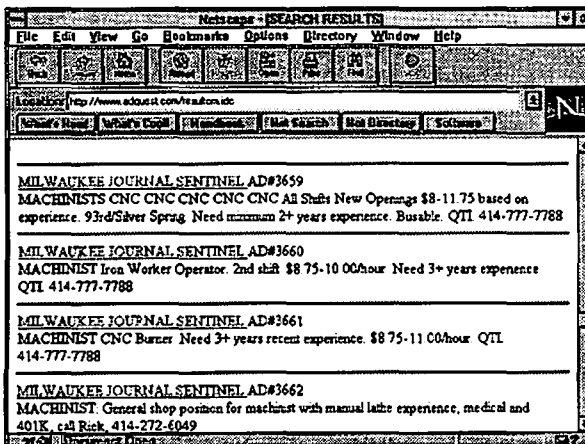
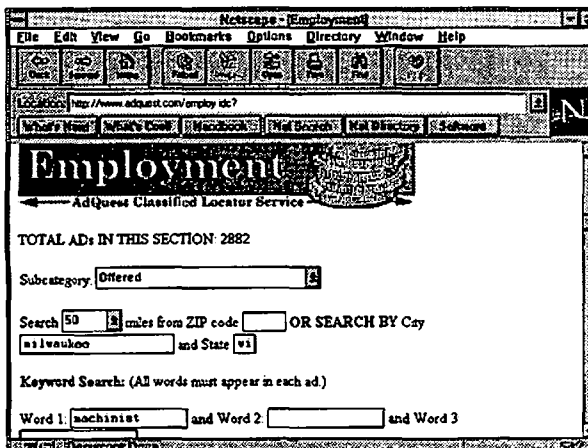
Starting Wages in Welding



Surfing the Net to Learn More About Careers

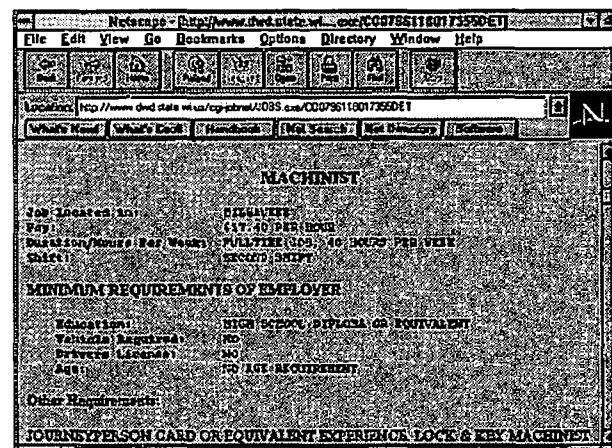
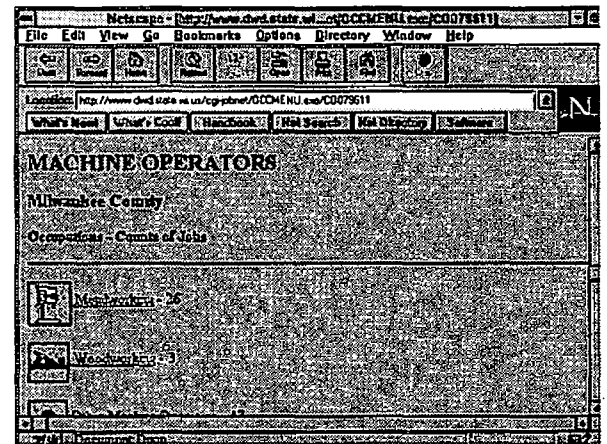
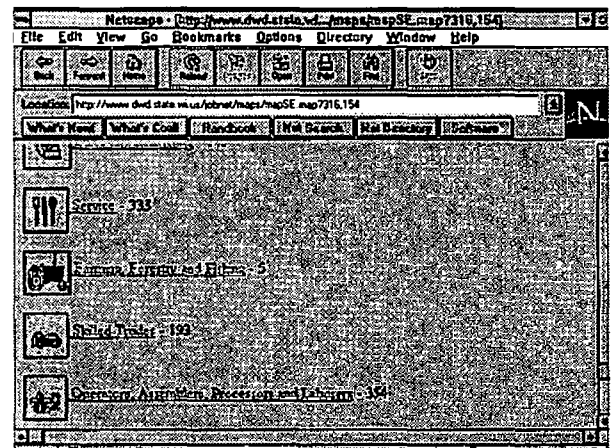
<http://www.adquest.com>

The classified employment ads are collected from throughout the United States from 165 publications including the Milwaukee Journal Sentinel. Searches can be conducted within any selected mile radius from your zipcode or city.



<http://www.jobnet.dwd.state.wi.us/>

Wisconsin's JobNet search system contains current job opportunities that employers have listed with the Wisconsin Job Service. If you see a job that interests you, read the employer contact information at the bottom of each job page for referral instructions. Select the geographic area and occupations of interest to you, then bring up jobs and examine the qualifications, salary and employer.

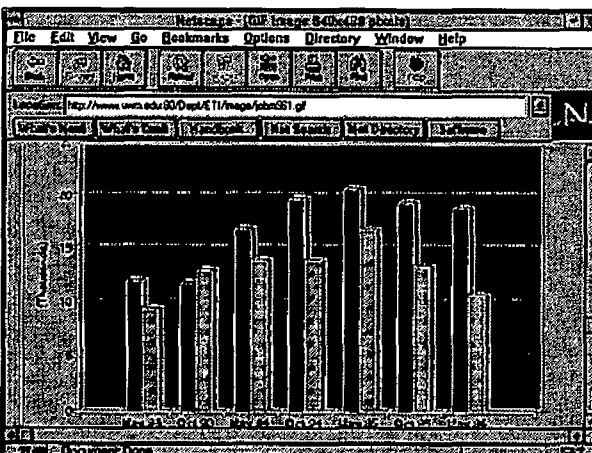
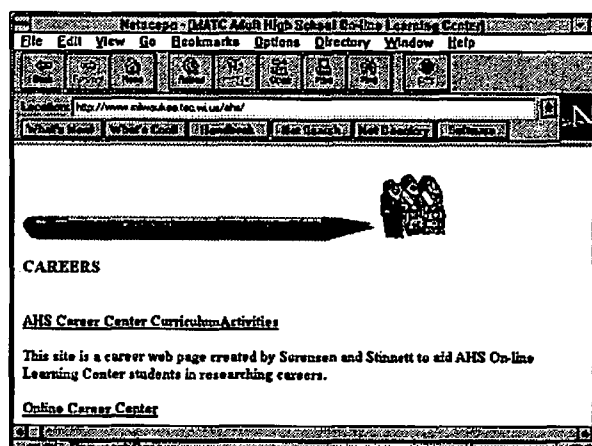
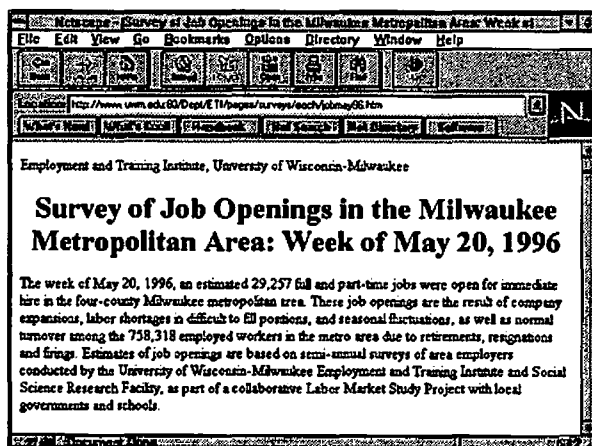
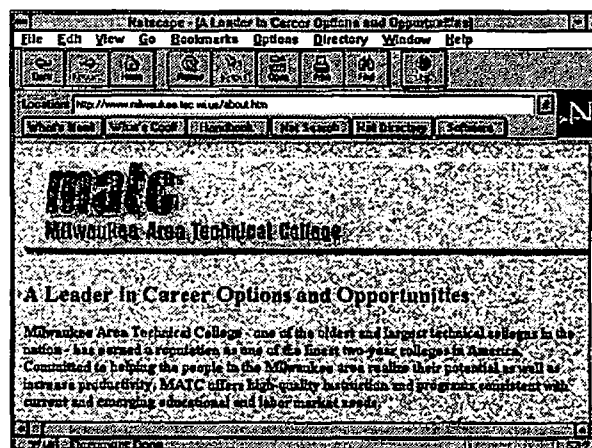
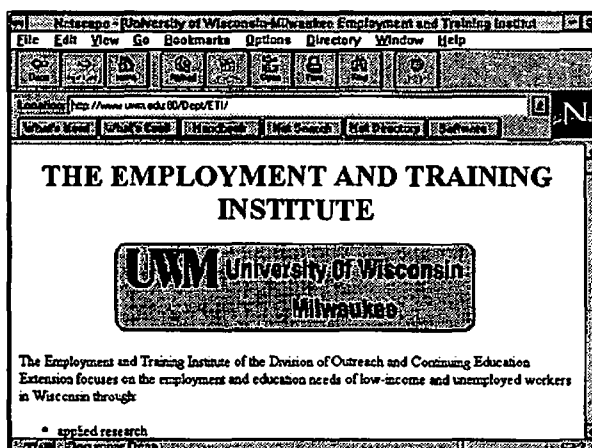


<http://www.uwm.edu/Dept/ETI/>

Updated information on changes in job requirements, pay rates and types of Milwaukee area companies hiring workers is summarized on the University of Wisconsin-Milwaukee Employment and Training Institute web site.

<http://www.milwaukee.tec.wi.us/>

The associate degree, technical diploma and certificate programs described in this booklet are all offered at Milwaukee Area Technical College. To learn more about other programs, use the MATC web site. You can look up earnings of recent graduates, courses available online, and information about career planning and employment services for students.



PARTNERS IN THE MILWAUKEE LABOR MARKET PROJECT

Milwaukee Area Technical College
Private Industry Council of Milwaukee County
Milwaukee Public Schools
City of Milwaukee
Employment and Training Institute, University of Wisconsin-Milwaukee

with funding support from the

Milwaukee Community Outreach Partnership Center,
University of Wisconsin-Milwaukee
U.S. Department of Housing and Urban Development
Helen Bader Foundation

This report was prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. Phone (414) 227-3388. The typical hourly rates shown for full-time job openings are from surveys of Milwaukee area employers conducted twice each year by the Employment and Training Institute and Social Science Research Facility. Job descriptions, types of skills needed for occupations and national job outlooks are from the U.S. Department of Labor's Occupational Outlook Handbook, 1996-97 Edition.

Photos are courtesy of Milwaukee Area Technical College.

Curriculum Ideas for "High Demand Jobs in Technical Fields Requiring 1-2 Years of College"



Introduction

This booklet is designed to help students learn about promising careers which require technical college training and to use labor market information in career planning. Although new workers are in high demand right now in the local labor market, postsecondary education opens up many more opportunities for jobs that are challenging and pay family-supporting wages.

Competency: Use labor market information to help develop career goals.

1. Help students use the U.S. Department of Labor's **Occupational Outlook Handbook** (book version or CD-ROM) to find out about careers that interest them. For each career, prepare a brief description of the kind of work done, qualifications for this work, and the national outlook for jobs in this area.
2. Use the computer to identify job openings in the Milwaukee area through the Milwaukee Journal Sentinel's listings or the Wisconsin Job Service (see booklet, p. 36). Help students record and graph the number of jobs in one field by whether they require college, technical training, occupation-specific work experience, or no experience. Compare pay rates for these openings.

3. Organize school field trips or invite workers from local companies and agencies in each of the five areas featured in the booklet -- health, computers and technology, business and management, services, and manufacturing. Arrange for students to talk with workers about their responsibilities, job preparation and changes they've seen in their field. Help students videotape the visits, so that they can share their findings with other classes.
4. Invite college students from your school district back to talk about what they've learned since they left high school. Which high school subjects are they finding important in college? Are there other subjects they wish they had taken?
5. Encourage students to invent a "job in the future" which may not be important now, but which could be very important in the future. What kind of training and talents do they think people would need to do this job?
6. Tap into the resources available within your school district to learn more about the high demand jobs featured in the booklet. For example, interview the school business office and computer staff about how computer and technological needs are changing. Interview custodial staff about the skills needed for building maintenance within a school setting. Invite a company that does printing jobs for the school district to discuss changes in that industry and emerging careers.

Competency: Identify training and skills needed for careers.

1. Ask each student to select one interesting occupation in this booklet. Using the list of SCANS skills discussed in the student booklet on "Job Opportunities in the Milwaukee Labor Market," identify 5 or 6 workplace skills which would be critical for this occupation. Help students identify ways they can improve these skills now.
2. Encourage students to interview workers who have held non-traditional jobs or who have dealt with racial, cultural or gender barriers. What advice do they have for new workers?

Reading Review Questions

"Thinking About the Future: High Demand Jobs in Technical Fields Requiring 1-2 Years of College"

1. Find several careers which require a person with talents or interests like you. Do you think you would like these jobs? Why or why not?
2. Examine the personal skills and talents needed for the high demand jobs in this booklet. What are frequently mentioned skills? How can you improve these skills while in school?
3. Based on the "Training Required" sections in the booklet, what high school courses do you think would help you in some of these job areas?
4. How many factors can you identify from the "National Job Outlook" sections that are increasing the number of jobs in high demand fields? What other jobs (not listed in this booklet) are also probably increasing because of these factors?
5. Many jobs in high demand require computer skills. Why do you think computers are used so often in business and industry today?
6. "Where's Waldo?" Find at least two jobs that are declining nationally but in high demand in the Milwaukee area.
7. Graph the job areas with the highest number of requests for recent MATC graduates. Why do you think these areas are showing more job requests than graduates? *[Consider both supply and demand.]*

3. Use your school's science fair as an opportunity to bring representatives from area businesses, MATC and other colleges to your school and to give students a chance to learn about careers and technological innovations that are affecting the labor market. Reward science fair participants with a VIP day at an area company where they can learn about the company's use of new technology.

Competency: Identify resources available for students interested in college education and training.

1. Help students request (or download from the Internet) information from colleges, other postsecondary educational institutions and training schools about programs available. Check on admission requirements, courses offered, certificates or degrees awarded, tuition and other costs, and the location and size of the school.
2. Invite college admission staff to speak about financial aid available, including grants, scholarships, college loans, and work-study jobs. Ask about employment services

available to help students find jobs during college and when they graduate.

3. Browse the U.S. Department of Education's Internet site on planning for your education (<http://easi.ed.gov/>).
4. Arrange for a day tour of Milwaukee area college campuses.

This guide was prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. For more information, contact Lois Quinn, (414) 227-3388.

*Partners in the Milwaukee Labor Market Project
City of Milwaukee
Milwaukee Public Schools
Milwaukee Area Technical College
Private Industry Council of Milwaukee County
Employment and Training Institute, University
of Wisconsin-Milwaukee*

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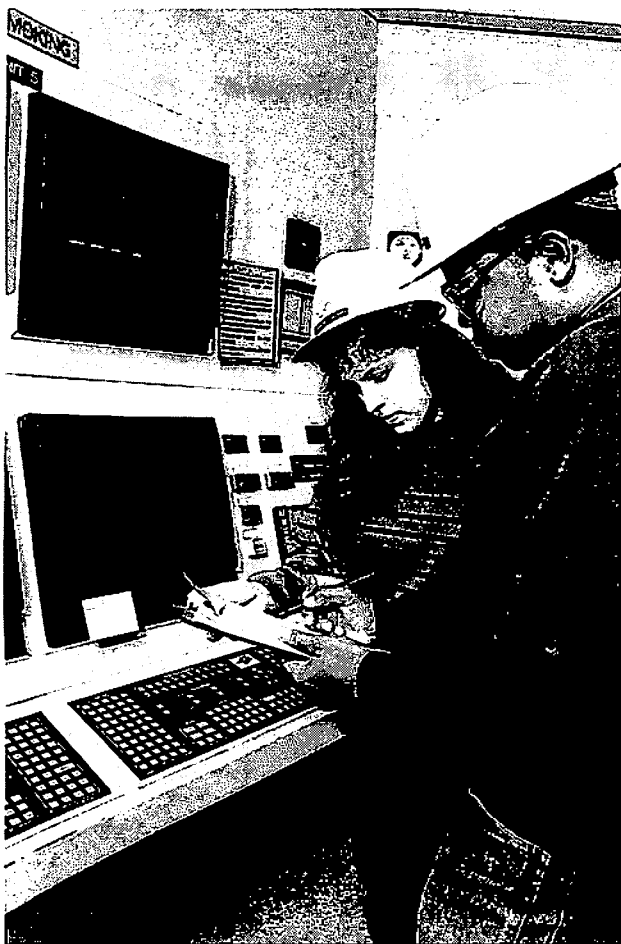
Thinking About the Future:

Expanding Career Opportunities for University Graduates



Milwaukee Labor Market Project





<i>Contents</i>	<i>Page</i>
<i>Introduction</i>	<i>1</i>
<i>Engineering</i>	<i>2</i>
<i>Computer Science</i>	<i>6</i>
<i>Business and Management</i>	<i>8</i>
<i>Education</i>	<i>12</i>
<i>Health</i>	<i>16</i>
<i>Social Work and Criminal Justice</i>	<i>18</i>
<i>Learning More About Careers</i>	<i>20</i>

Job descriptions, types of skills needed for occupations, and national job outlooks in this booklet are from the U.S. Department of Labor's Occupational Outlook Handbook, 1996-97 Edition. Typical hourly pay rates are from surveys of employers in Milwaukee, Ozaukee, Washington and Waukesha counties conducted by the University of Wisconsin-Milwaukee Employment and Training Institute and the Social Science Research Facility. Jobs cited are full-time and require a four-year college degree in the field; they do not usually require prior years of work experience. Average starting salaries for university graduates are based on a 1996 follow-up study of University of Wisconsin-Milwaukee bachelor's and master's degree graduates from each of the professional schools.

Expanding Career Opportunities for University Graduates

"To get a good job, get a good education." While almost everyone has heard this slogan, few realize how much more it means today than even ten years ago. Rapid technological advances have created a need for better educated and skilled workers, and today's economy offers a greater pay-off for the well-educated worker. According to the U.S. Department of Labor, the gap between the earnings of high school and college graduates has widened dramatically since 1980.

Over the next decade, jobs for persons with a college bachelor's degree or more are expected to rise by six million in the United States. The Department of Labor projects that one out of every three new jobs will require at least a bachelor's degree. Another 1.7 million new jobs will require workers with a college associate degree or post-secondary vocational training.

In the Milwaukee area new workers in high skill jobs are doing well. At the same time many workers with only a high school diploma are losing ground in the workplace. Investing your time and effort in education and skill training can prepare you for a career which offers challenging work and good pay, particularly in fields where job demand is great.

The careers highlighted in this booklet require four years of college and are expected to be in strong demand into the 21st century. In fields like teaching and computer science there should be many job openings available when you graduate from college. In some fields, you may have to look outside the Milwaukee or Wisconsin area to find the job that is right for you. As you consider the careers highlighted, you may want to collect information on related occupations which fit your interests and talents.



Engineering

- ✓ *Do you communicate well?*
- ✓ *Can you work as part of a team?*
- ✓ *Do you have an analytical mind?*
- ✓ *Do you have a capacity for detail?*
- ✓ *Are you interested in new technology?*

National Job Outlook

Job opportunities for engineers are expected to be good for a number of years. Companies need engineers in order to remain competitive and to use new technologies. The majority of job openings will result from replacing engineers who retire or move into management or sales jobs.

Because of population growth and an expanding economy, **civil engineers** will be needed to design and construct higher capacity transportation, water supply, and pollution control systems, large buildings, and other structures. They will also be needed to repair and replace existing roads, bridges and public structures.

Jobs for **industrial engineers** will increase due to industrial growth, more complex business operations, and the greater use of automation in factories and in offices. The services of industrial engineers should be in demand as manufacturing companies seek to reduce costs and to increase productivity.

Even though total employment in manufacturing is expected to decline nationally, jobs for **mechanical engineers** should increase. Companies will have more need for machinery and machine tools and will want engineers who understand complex processes. Jobs for mechanical engineers are expected to expand in construction and service companies as these industries learn to apply engineers' skills.

There should be enough jobs for all the new graduates in **electrical and electronic engineering**. Consumer demand for electrical and electronic goods will create some additional engineering jobs. However, because many electrical engineering jobs are defense-related, there will be cutbacks in engineers for these industries. Engineers who keep up with the rapid changes in technologies will be *most likely* to advance.

Other Careers to Consider

- ◆ architect
- ◆ computer scientist
- ◆ engineering technician
 - ◆ mathematician
- ◆ physical scientist
- ◆ surveyor

Mechanical Engineers

Mechanical engineers plan and design tools, engines, machines and other mechanical equipment. You could help develop internal combustion engines, steam and gas turbines, robots, machine tools, underwater technology, refrigeration and air-conditioning equipment, and other industrial production equipment. You may work in management, production operations, maintenance or technical sales.

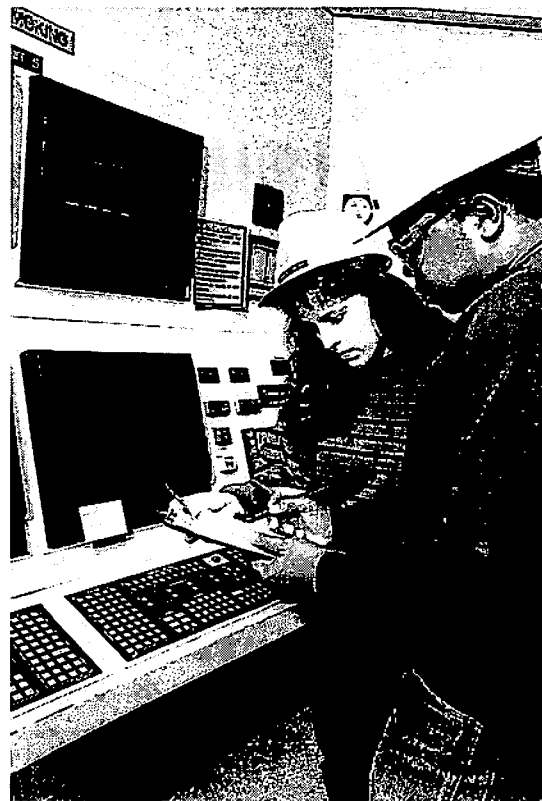


Students in UWM mechanical engineering courses use "high-tech" equipment to test company products.

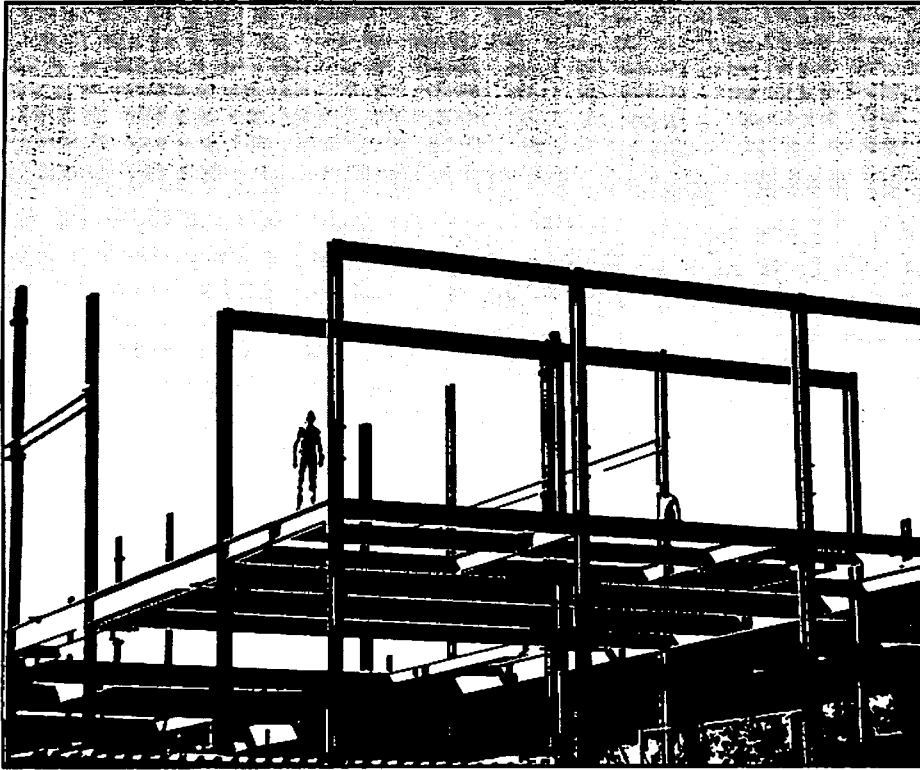
Electrical Engineers

Electrical engineers design, develop, test and supervise the manufacture of electrical equipment, such as power generating equipment for utilities, electric motors, machinery controls, and lighting and wiring for buildings, cars and aircraft. You may design new products, write performance requirements, develop maintenance schedules, test equipment and estimate the cost of engineering projects.

Co-op engineering programs give students a chance to gain work experience in their field. Here, Laurie Hipp checks power plant operations under the direction of results engineer John Smith.



Civil Engineers



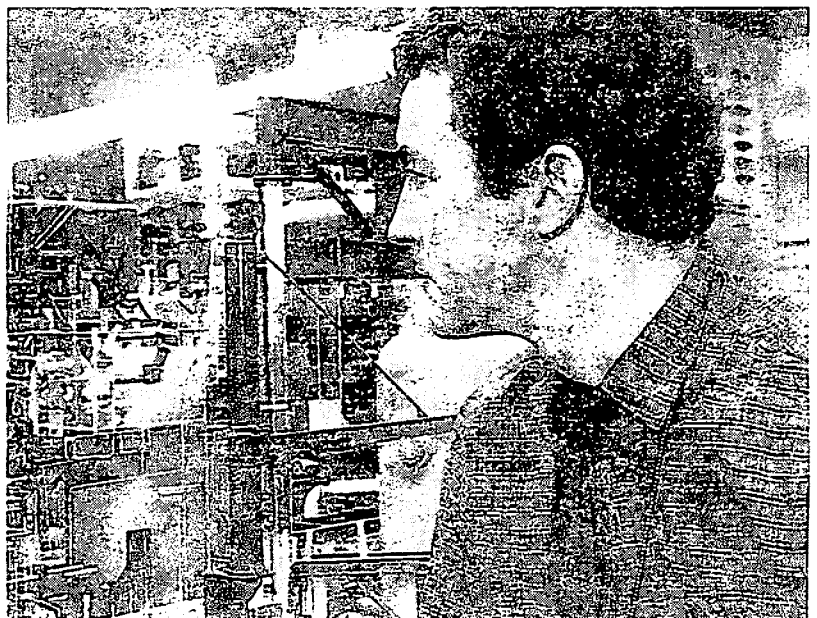
Civil engineers design and supervise the construction of roads, airports, tunnels, bridges, water supply and sewage systems, and buildings.

You may specialize in structural engineering, water resources, the environment, construction, transportation, or geotechnical engineering. You could work in design, construction, research, teaching or administrative work.

Industrial Engineers

Industrial engineers plan the most productive and effective way to make products. You may help increase productivity through management of people, improved business methods or use of technology. You may develop management control systems to aid in financial planning and cost analysis, design production control systems, develop job evaluation programs, or improve systems for distributing goods and services. You could work as a consultant or employee for a manufacturing company, government agency, hospital, bank, or other retail or service organization.

Industrial engineers often direct the research, development and manufacture of products.



Milwaukee Area Job Opportunities

Milwaukee Area Job Estimates: 1992-2005

Job Title	Annual Job Openings Due To:			Estimated Total Workers in 2005
	Growth	Replacement	Total	
<i>Electrical and electronics engineers</i>	4	53	47	2,569
<i>Mechanical engineers</i>	-5	45	40	2,122
<i>Civil engineers</i>	8	23	31	1,078
<i>Industrial and safety engineers</i>	1	25	26	924

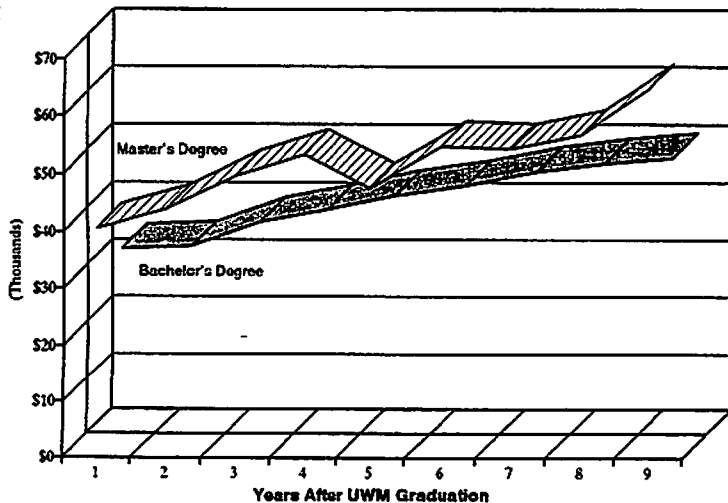
Source: Wisconsin Department of Workforce Development

Typical Starting Salaries in Engineering Milwaukee Area Job Openings

<i>Mechanical engineer</i>	\$23,000
<i>Engineering-planning assistant</i>	\$29,300
<i>Field process engineer</i>	\$30,000
<i>Associate research and development engineer</i>	\$30,000
<i>Electrical engineer</i>	\$30,000
<i>Civil engineer, environment</i>	\$33,280
<i>Controls engineer</i>	\$35,360
<i>Service engineer, electrical</i>	\$36,000
<i>Manufacturing engineer</i>	\$37,000

Source: Employment and Training Institute Survey of Employers

Avg. Earnings of Engineering Graduates University of Wisconsin-Milwaukee



The average salary of engineering graduates with bachelor's degrees from UWM is \$32,749 their first year after graduation and \$48,611 nine years after graduation.

The average salary of engineering graduates who earn master's degrees from UWM is \$40,715 their first year after graduation and \$65,026 nine years after earning the degree.

Source: University of Wisconsin-Milwaukee

Computer Science

- ✓ *Are you a logical thinker?*
- ✓ *Do you have good communication skills?*
- ✓ *Can you handle several jobs at one time?*
- ✓ *Do you like working with people and ideas?*
- ✓ *Do you like being on the cutting edge of technology?*

Computer Scientists



Computer scientists and engineers design computers, develop computer systems and games, and create new computer hardware.

Systems analysts help businesses and governments plan new computer systems, add new software applications, write programs, and train staff to use computer technologies in their work.

Two out of every three college graduates use computers on the job. As art director for a local manufacturing business, Nguyen Tran uses the computer in designing advertisements for trade publications, sales flyers and brochures.

National Job Outlook

Computer scientists and systems analysts will be among the fastest growing occupations through the year 2005. Large numbers of job openings will also result each year from the need to replace workers who move into management jobs or other careers. Because of worldwide business competition, companies face growing pressure to use technological advances, including office and factory automation, telecommunications technology, and scientific research. Many companies are beginning to use computer networks to help workers share their data and will often hire computer analysts to design these systems. In addition, with costs of computer hardware and software going down, more small companies will hire staff to help computerize their business operations.

Milwaukee Area Job Opportunities

Milwaukee Area Job Estimates: 1992-2005

Job Title	Annual Job Openings Due To:			Estimated Total Workers in 2005
	Growth	Replacement	Total	
<i>Computer programmers</i>	43	67	110	3,375
<i>Systems analysts</i>	66	21	87	4,010
<i>Computer engineers</i>	9	5	14	884

Source: Wisconsin Department of Workforce Development

Typical Starting Salaries in Computer Science Milwaukee Area Job Openings

<i>Information services specialist</i>	\$20,000
<i>Computer operator, manufacturing</i>	\$25,000
<i>Computer programmer</i>	\$25,200
<i>Programmer/analyst</i>	\$30,000
<i>Software engineer</i>	\$37,000
<i>Computer analyst</i>	\$40,770
<i>NC/CNC programmer</i>	\$42,000

Source: Employment and Training Institute Survey of Employers

Other Careers to Consider

- ♦ actuary
- ♦ applied mathematician
- ♦ economist
- ♦ electrical engineer
- ♦ electronics engineer
- ♦ management consultant
- ♦ operations research analyst
- ♦ statistician

Business and Management

- ✓ *Can you manage your time well?*
- ✓ *Do you communicate well with others?*
- ✓ *Are you good at handling unexpected challenges?*
- ✓ *Are you able to analyze and interpret information?*
- ✓ *Do you enjoy motivating groups of people to work together?*

National Job Outlook

Many careers in business and management are expected to grow faster than average through the year 2005. Because the accounting field is so large, thousands of jobs for accountants will open up each year when workers retire or move into other careers. New businesses need accountants and auditors to set up their accounting systems, prepare their taxes and provide advice to managers. When companies grow, their need for financial data increases as well. Persons who have passed their CPA (Certified Public Accountant) exam will have the best job opportunities.

Most new jobs for **human resource managers** will be in the private sector helping companies improve worker productivity and work quality. The demand for personnel experts will increase due to legislation and court rulings on job safety, equal employment opportunity, wages, family leave and other benefits. There will also be a need for international specialists who can work with companies that have offices around the world.

Management consultants will be needed to help companies become more competitive, reduce costs, use new technologies and market products. Despite the growth of jobs in this area, competition for work may be intense because companies will look for highly talented individuals who can best help their company.

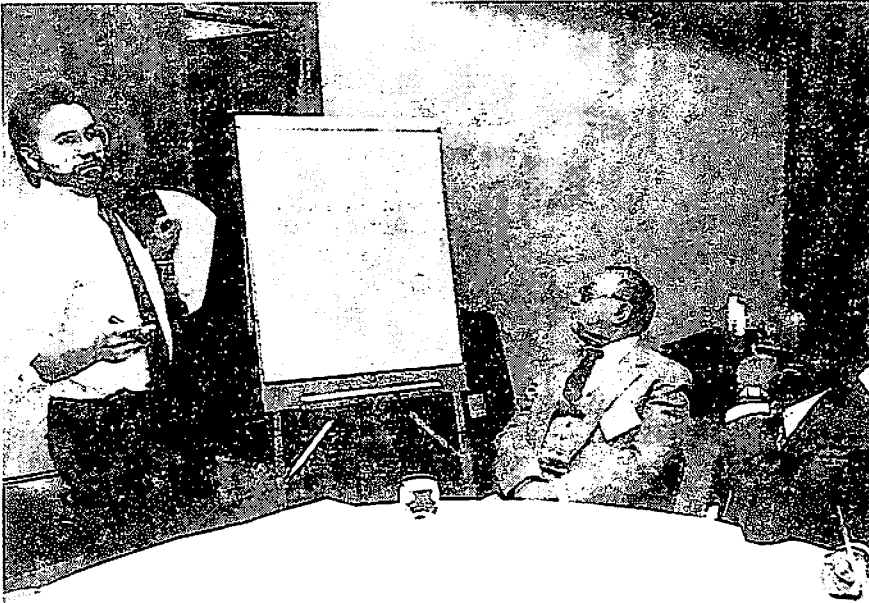
Because **marketing, advertising and public relations** jobs are interesting and very challenging, there will be competition among the most talented workers. Since more companies are competing with international firms, this work will be very important in selling products and services. In many cases, companies will hire consultants to work on projects rather than employ people full-time.

Other Careers to Consider

- ◆ loan officer
- ◆ economist
- ◆ bank officer
 - ◆ actuary
 - ◆ lawyer
- ◆ business appraiser
- ◆ employment counselor
 - ◆ purchasing agent

Management Consultants ▼

Management consultants help companies and agencies find solutions to management problems and improve the work environment. You may help workers define department or company goals, analyze planning and management data, interview staff and observe how the company works. You might then be asked to develop recommendations and to help companies implement your suggestions. About half of all management consultants are self-employed or work for small consulting firms.



Management consultants may spend a significant portion of their time with clients.

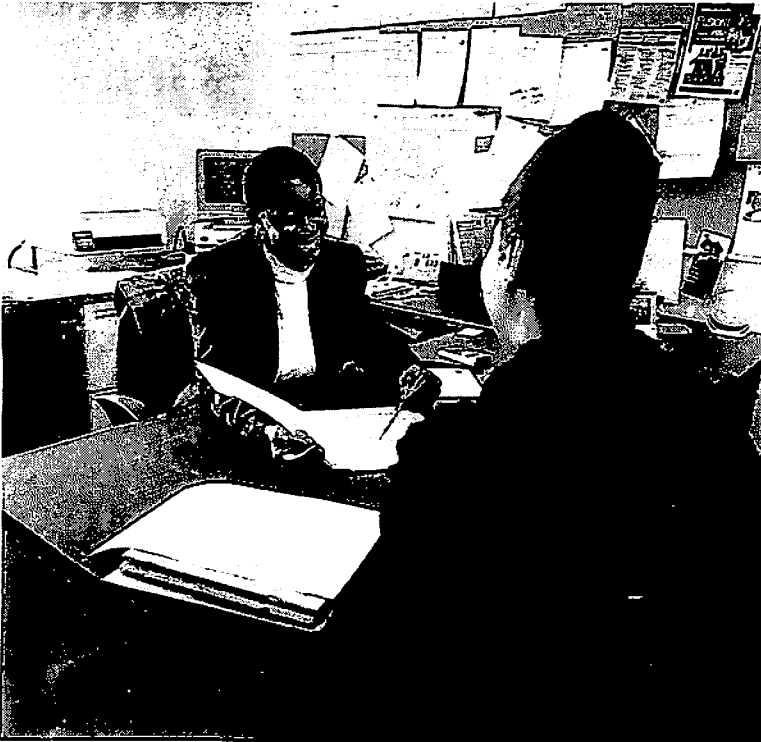
Marketing Managers ▼

Marketing managers help companies plan how to sell their products and services. You could do research to decide how much demand there is for products, analyze market research data, or develop advertising campaigns. You may help prepare radio and television ads, catalogs, store displays and special events. Or you may handle public relations for your organization.

The ability to work on teams is an important skill desired by employers. Companies look for workers who can cooperate with others and contribute to group efforts with ideas and suggestions.



Human Resource Managers

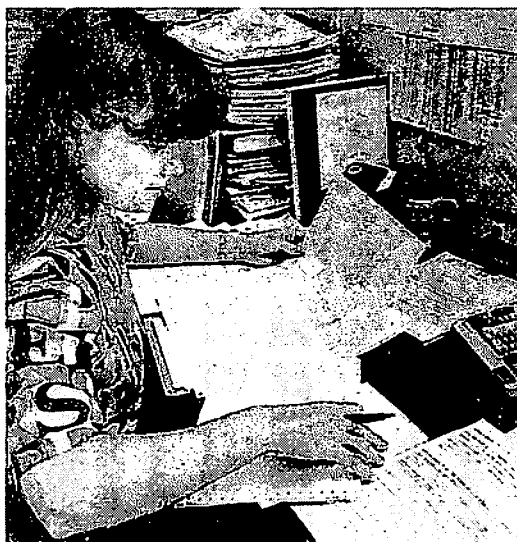


Human resource specialists and managers recruit and interview employees and give advice on hiring decisions. You may also help your firm improve worker skills, help boost workers' satisfaction with their jobs, and evaluate job performance. In small companies, one person could handle all of the personnel, training and labor relations work. In larger organizations, different staff may recruit new workers, help the company meet affirmative action and diversity goals, write job descriptions, and manage employee benefit programs.

Personnel, training and labor relations specialists will be needed as companies devote greater resources to job-specific training programs.

Accountants and Auditors

Accountants and auditors prepare, analyze and check the accuracy of financial reports and taxes. You may also be asked to develop information to help companies manage their business activities. Accountants are responsible for budgeting, cost management, performance evaluations and financial planning. Auditors often check agencies' financial data and business procedures to make sure that financial records are accurate.



Certified Public Accountants (CPAs) have the widest range of job opportunities.

Milwaukee Area Job Opportunities

Milwaukee Area Job Estimates: 1992-2005

Job Title	Annual Job Openings Due To:			Estimated Total Workers in 2005
	Growth	Replacement	Total	
<i>Financial managers</i>	53	79	132	5,686
<i>Accountants and auditors</i>	49	76	125	5,961
<i>Marketing, advertising, PR managers</i>	31	67	98	3,974
<i>Personnel, training, labor relations</i>	16	49	65	2,051

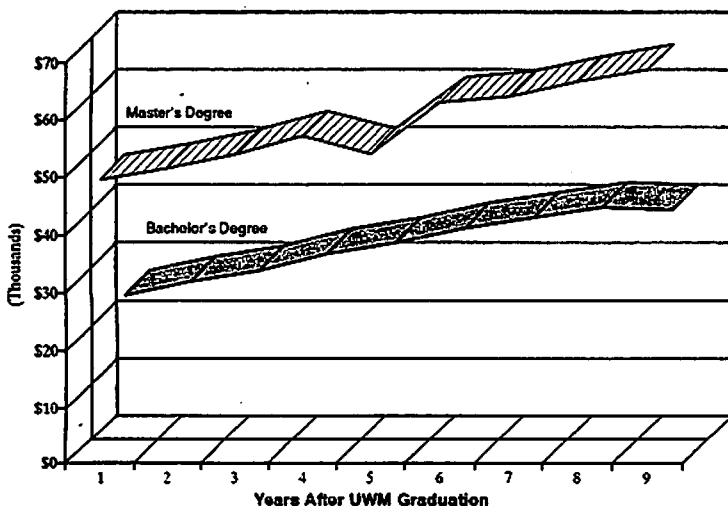
Source: Wisconsin Department of Workforce Development

Typical Starting Salaries in Business and Management Milwaukee Area Job Openings

<i>Quality control technician</i>	\$20,200
<i>Credit manager</i>	\$22,000
<i>Human resources coordinator</i>	\$24,000
<i>Territory sales manager</i>	\$25,000
<i>Quality inspector</i>	\$25,210
<i>Claims representative</i>	\$26,000
<i>Accountant, CPA</i>	\$27,500
<i>Research analyst, credit union</i>	\$28,800

Source: Employment and Training Institute Survey of Employers

Avg. Earnings of Business Graduates University of Wisconsin-Milwaukee



Salaries of business school graduates with bachelor's degrees from UWM averaged \$25,206 their first year after graduation and \$40,000 nine years after graduation.

The average salary of business school graduates who earned master's degrees from UWM was \$49,596 their first year after graduation and \$68,830 eight years after earning the degree. Many of these graduates had several years of work experience.

Source: University of Wisconsin-Milwaukee

Education

- ✓ *Can you work cooperatively with others?*
- ✓ *Are you able to inspire trust and confidence?*
- ✓ *Do you have a talent for working with young people?*
- ✓ *Do you have good research and communication skills?*
- ✓ *Do you have good organizational and administrative skills?*

National Job Outlook

Total employment of **kindergarten, elementary, and secondary school teachers** is expected to increase faster than the average for all occupations through the year 2005. However, job growth will vary among various teaching occupations and school subjects. Job openings for all teachers are expected to increase substantially by the end of the 1990s as the large number of teachers now in their forties and fifties begin to retire. The student population of fourteen to seventeen-year-olds is expected to show strong growth through the year 2005, spurring demand for secondary school teachers. The population of five to thirteen-year olds also is projected to increase at a slower rate. At the same time, the supply of persons training to be teachers is expected to increase in response to reports of improved job prospects, more teacher involvement in school policy, greater public interest in education, and higher salaries. Mathematics, science and special education teachers remain in short supply.

Jobs for **exceptional education teachers** should increase because of expanded laws supporting training and employment for individuals with disabilities. Exceptional education teachers will also be needed because advances in technology are helping more children survive accidents and serious illnesses, and because of growing public interest in individuals with special needs.

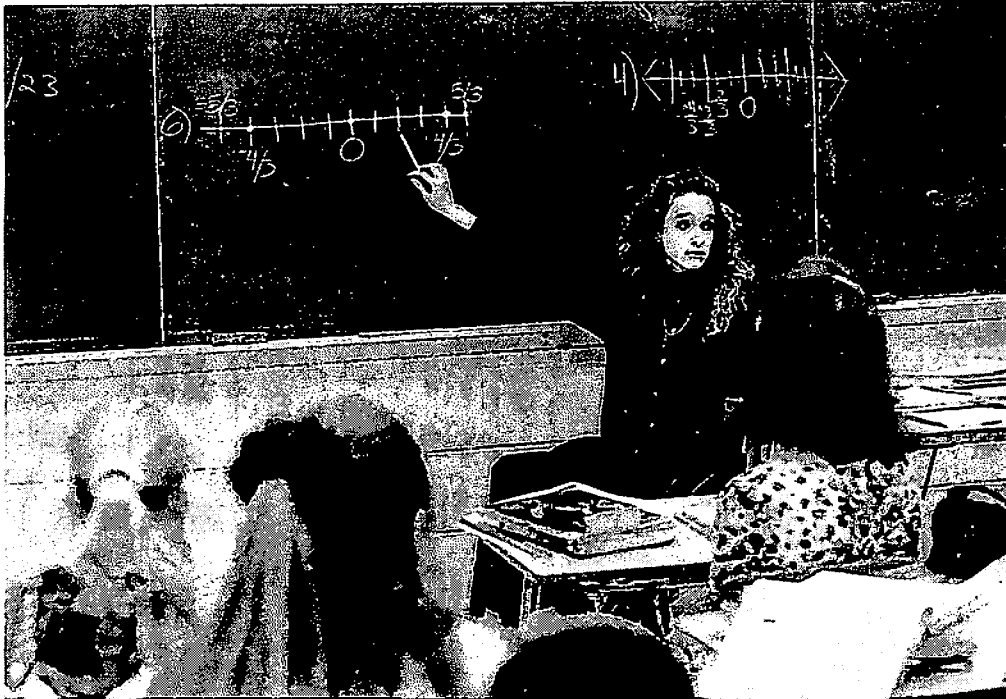
Teachers who are **bilingual** or have multicultural experience are needed to work with an increasingly diverse student population.

Other Careers to Consider

- ◆ college and university faculty
- ◆ counselor
- ◆ education administrator
- ◆ employee development specialist
- ◆ librarian
- ◆ public relations specialist
- ◆ recreational therapist
- ◆ school psychologist
- ◆ social worker

Kindergarten/Elementary School Teachers

Kindergarten and elementary school teachers play a vital role in the development of children. Besides using reading materials and classroom discussions, you may utilize computers, videos, games, music, artwork, films, slides, and other teaching technology to teach basic skills. You may work in a single classroom or cooperate with several teachers in a multilevel student setting. In addition to classroom activities, you will plan student lessons, prepare tests, grade papers, supervise extracurricular activities, and meet with parents and school staff to discuss student needs. You may also participate in education conferences and workshops to continue learning yourself.



Education students spend at least one semester "practice teaching." Here, UWM student Wendy Petzold teaches seventh grade math.

Bilingual Teachers

Bilingual teachers, who have knowledge of several languages, often teach the school curriculum using a student's native language. You may teach in classrooms in which two languages (English and another language) are used for instruction or you may teach students English as a Second Language.



Body language is very helpful in bilingual education.

Exceptional Education Teachers

Exceptional education teachers work with students--from toddlers to adults in their early 20s--who have a variety of disabilities or special education needs. You may help develop individualized education programs for students, design and modify classroom or group instruction to meet each student's special needs, and work with social workers, school support staff, parents and other teachers. You could specialize in the needs of children who have specific learning disabilities, mental retardation, speech or language impairment, serious emotional disturbance, visual and hearing impairment, orthopedic impairment, autism, traumatic brain injury, or other health impairments. Increasingly special education and non-specialized teachers are working together to help students learn in general education classroom settings.

Secondary School Teachers

Secondary school teachers, who generally teach high school students, help youth explore subjects more deeply and acquire information about the world and themselves. You will specialize in specific subjects, such as English, Spanish, mathematics, history or biology, and teach a variety of related courses -- for example, American history, contemporary American problems, and world geography. You could also design classroom presentations and activities to meet student needs and abilities, assist students in choosing colleges and careers, and help your school make decisions regarding the budget, textbook choices, curriculum design, and teaching methods.

"If you can't connect
with kids, you can't
teach."

-- Derrick Rogers
(UWM Education,
Class of 1987)



Milwaukee Area Job Opportunities

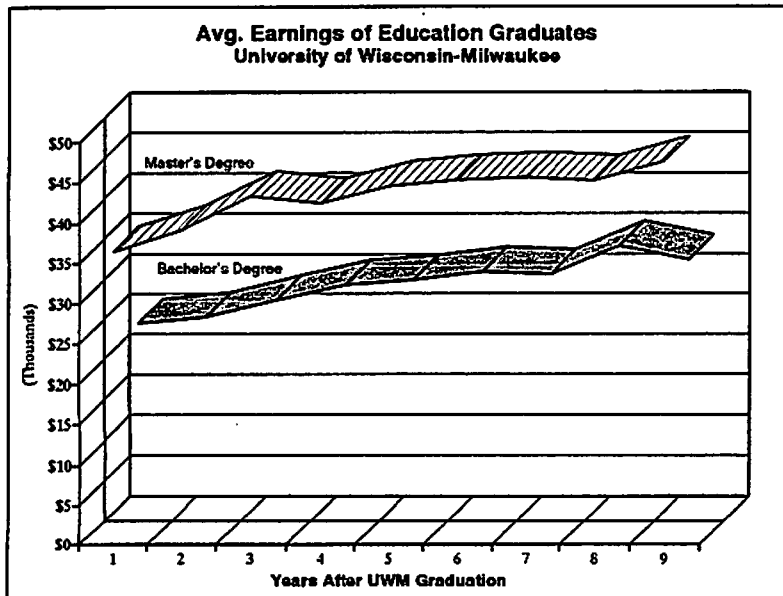
MILWAUKEE AREA JOB ESTIMATES: 1992-2005

Job Title	ANNUAL JOB OPENINGS DUE TO:			Est. Total Workers in 2005
	Growth	Replacement	Total	
Teachers, secondary school	267	178	445	10,946
Teachers, elementary	158	136	294	9,180
Teachers, special education	121	22	143	3,375
Teachers, pre-school and kindergarten	42	24	66	3,191

Source: Wisconsin Department of Workforce Development

Milwaukee area employers reported salaries of \$18,000 to \$30,000 for job openings in teaching. School districts usually follow a salary schedule for teachers based on years of education and experience and not subjects taught.

Source: Employment and Training Institute Survey of Employers



The average salary of education graduates with bachelor's degrees from UWM is \$24,402 their first year after graduation and \$32,327 nine years after graduation.

The average salary of education graduates who earn master's degrees from UWM is \$36,516 their first year after graduation and \$47,623 nine years after earning the degree.

Source: University of Wisconsin-Milwaukee

Social Work/Criminal Justice

- ✓ Do you get along well with others?
- ✓ Are you sensitive to people and their feelings?
- ✓ Are you good at handling responsibility?
- ✓ Can you approach problems objectively?
- ✓ Do you enjoy meeting challenges?

▼ National Job Outlook

Jobs for social workers are expected to increase faster than average through the year 2005. The number of older people is growing rapidly, and they are more likely to need social services. Workers will also be needed to address concerns of persons who are mentally ill, mentally retarded, AIDS patients, or families in crisis. Many job openings will result from the need to replace social workers who leave the occupation. In some cases, agencies are hiring lower-paid and less trained human services workers instead of social workers. Competition will be greater for social work jobs in cities where there are more training programs; rural areas often find it difficult to find and retain qualified staff.

Jobs for court workers, parole officers and probation officers are likely to increase faster than average. The number of people sentenced to prison will likely increase due to rising public concern about the spread of crime and illegal drugs. At the same time, mandatory sentencing guidelines are calling for longer prison sentences and reduced parole for prison inmates.

▼ Social Workers

Social workers help people deal with a wide range of problems. You may help individuals and families cope with mental illness or problems of inadequate housing, unemployment, lack of job skills, financial problems, illness, disabilities, substance abuse, unwanted pregnancy, or antisocial behavior. You could help clients identify their concerns, consider solutions, and find resources, or help develop community programs to address child abuse, homelessness, poverty or violence.

Social work offers field placements in many different agency settings, such as this nursing home.



Probation and Parole Officers

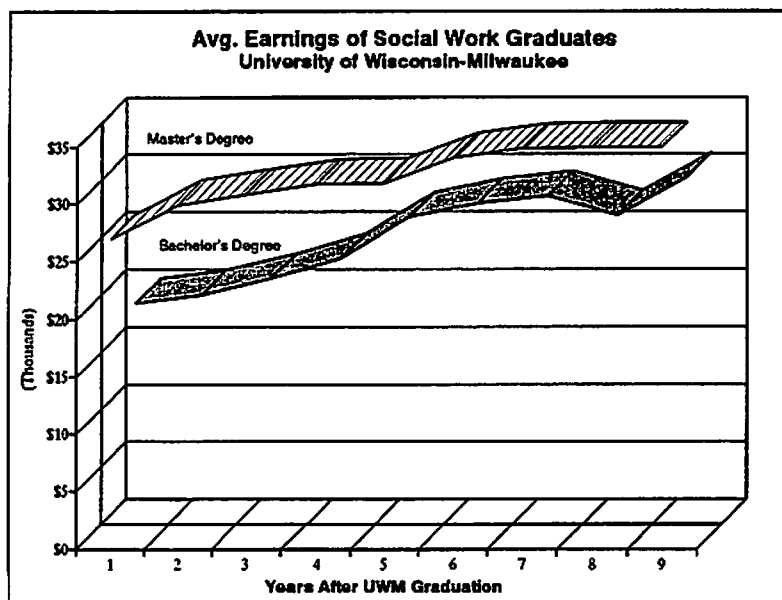
Probation and parole officers monitor and counsel offenders, process their release from correctional institutions, and evaluate their progress in becoming productive members of society. Social workers also make recommendations to courts, do pre-sentencing assessments, and provide services for inmates and their families.

Milwaukee Area Job Opportunities

Typical Starting Salaries in Business and Management Milwaukee Area Job Openings

<i>Resident care worker</i>	<i>\$16,640</i>
<i>Caseworker</i>	<i>\$18,600</i>
<i>Job assessment specialist</i>	<i>\$20,000</i>
<i>Social worker/case manager</i>	<i>\$20,500</i>
<i>Social worker I</i>	<i>\$26,270</i>
<i>Social worker, AODA</i>	<i>\$31,200</i>
<i>Psychiatric social worker, MSW</i>	<i>\$32,050</i>

Source: Employment and Training Institute Survey of Employers



The average salary of social work graduates with bachelor's degrees from UWM is \$19,231 their first year after graduation and \$30,125 nine years after graduation.

The average salary of social work graduates who earn master's degrees from UWM is \$26,947 their first year after graduation and \$37,693 nine years after earning the degree.

Source: University of Wisconsin-Milwaukee

Other Careers to Consider

- ◆ counselor
- ◆ vocational rehabilitation counselor
- ◆ police officer
- ◆ clergy
- ◆ recreation leader

- ✓ Do you communicate well?
- ✓ Do you work well with people?
- ✓ Can you handle responsibility?
- ✓ Are you a flexible, creative person?
- ✓ Are you caring and sympathetic toward others?

National Job Outlook

Jobs for health professionals are expected to grow faster than average. Jobs for **registered nurses** will increase because technology is allowing more medical problems to be treated and because the number of older people needing care is rising. Besides jobs for hospital nurses, many new jobs will be available for nurses providing home health care. Opportunities will be best for nurses with bachelor's and master's degrees.

Jobs for **health service managers** in home health care agencies, medical offices, and nursing care facilities will grow rapidly. Many health services previously offered in hospitals will move to these facilities. Workers will also be needed to deal with changing government regulations and insurance programs. Jobs in medical group practices will increase as HMO's (health maintenance organizations) become larger and more complex.

Health Services Managers

Health services managers help coordinate the delivery of health care services. You may manage hospital departments, a nursing home or medical clinic. Or you may help with community health and education outreach, planning, marketing, staff training, or office management.

Jacqueline Sills-Ware and head flight nurse Jim Singer scheduling tours of Flight for Life operations. Jacqueline earned a bachelor's degree in allied health and returned to UWM for a master's degree to increase her business skills.



Nurses ▼

Nurses care for sick and injured patients and help people stay well. You may record patient symptoms and progress, assist during treatment and exams, give medicine, and care for patients recovering from illnesses. Growing numbers of nurses are helping people in their homes or in company offices. Or you could provide community health education or supervise the work of other health professionals. Registered nurses (RN's) with four-year college bachelor's degrees are sought for many administrative and supervisory positions.



Nurses are concerned with the "whole person," providing for the physical, mental, and emotional needs of their patients.

Milwaukee Area Job Opportunities ▼

Milwaukee Area Job Estimates: 1992-2005

Job Title	Annual Job Openings Due To:			Estimated Total Workers in 2005
	Growth	Replacement	Total	
Registered nurses	279	203	482	17,193
Medicine and health service managers	22	18	40	1,353

Source: Wisconsin Department of Workforce Development

Typical Starting Salaries for Health Professionals Milwaukee Area Job Openings

Case manager, health care	\$16,640
Patient representative	\$18,400
Health education assistant	\$25,500
Hospital staff nurse	\$28,000
Physician assistant	\$33,600
RN care manager	\$36,400

Source: Employment and Training Institute Survey of Employers

Other Careers to Consider ▼

- ♦ physician
- ♦ occupational therapist
- ♦ paramedic
- ♦ physician assistant
- ♦ respiratory therapist
- ♦ rehabilitation counselor

Learning More About Careers

Research Careers at Your Library or Guidance Office

The U.S. Department of Labor's **Occupational Outlook Handbook** describes 250 careers, including the nature of the work, employment prospects, training required, earnings, and opportunities for advancement. Many schools and libraries maintain files of materials on careers and subscribe to journals and trade magazine which discuss career opportunities and new developments in career fields. Professional organizations, trade associations and labor unions often provide free or inexpensive career materials. The **Handbook** lists several useful contacts for each career. In many cases, these groups will provide information about local membership and student organizations they support. Most national organizations now maintain Web sites on the Internet.

Review Career Information from Colleges and Trade Schools

Your school counselor or local librarian can help you check out information on colleges, universities, trade schools, apprenticeships and other vocational training programs. You may want to request catalogs or brochures from schools with programs that you might consider.



Planning for Education Today

Okay, you have reached a point where you're beginning to think about what happens after high school. There are many options from finding a job, learning a trade, joining the military or other public service programs (i.e. Job Corps and AmeriCorp) or going on with your education by attending a postsecondary education institution. To help you make that decision we have assembled these pages.

If you are now convinced that you should attend a postsecondary school there are several steps that you should take to enhance your opportunities to attend the school of your choice.

1. What do you need to prepare for postsecondary education now.
2. How to choose the "right" postsecondary school.
3. How to apply to the school (and increase your chances to get in!)
4. How to fund the cost of these additional school years.

The U.S. Department of Education has a web site (easi.ed.gov) with in-depth information on finding colleges and universities, financial aid, and career programs throughout the United States. You can request a financial aid packet by phone (1-800-433-3243).

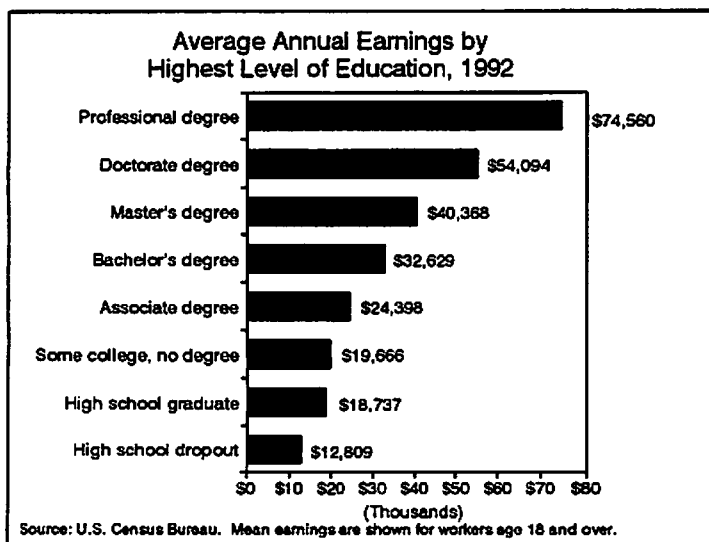
Most colleges and universities now maintain Internet pages. The UWM site (www.uwm.edu) describes campus departments and activities.

Contact Workers With Careers That Interest You

Interview adults about the challenging aspects of their work, what education and training they needed, and why they like their job. Arrange to "job shadow" an adult working in a career that interests you. If possible, volunteer for a summer or after-school "internship" at this worker's company to gain career-related experience and contact with workers in this field.

Study the Labor Market

You can monitor the current labor market by studying U.S. Department of Labor reports (available on the Internet and at your local library), reading the business section of newspapers and periodicals, and reviewing job listings. Current job openings from the Milwaukee Journal Sentinel and other newspapers are listed at www.adquest.com. Wisconsin Job Service listings are shown at jobnet.dwd.state.wi.us.



According to the U.S. Census Bureau, on average workers with a two-year college associate degree earn \$5,600 more each year than high school graduates and workers with a four-year degree earn \$13,900 more.



A service of the United States Department of Labor and your state public Employment Service Agency

About America's Job Bank

This Web site (www.AJB.dni.us) links 1,800 state employment services around the United States. You can search for jobs by state, occupational category or specific job title.

The America's Job Bank computerized network links the 1,800 state Employment Service offices. It provides job seekers with the largest pool of active job opportunities available anywhere. For employers it provides rapid, national exposure for job openings. The 'nationwide' listings in America's Job Bank contain information on approximately 250,000 jobs.

In addition to the Internet, America's Job Bank is available on computer systems in public libraries, colleges and universities, high schools, shopping malls, and other places of public access. AJB is also available at transition offices on military bases worldwide.

About Our Job Listings

Most of the jobs listed on America's Job Bank are full-time listings and the majority are in the private sector. Approximately five percent of the job listings are in government. The job openings come from all over the country and represent all types of work, from professional and technical to blue collar, from management to clerical and sales.

PARTNERS IN THE MILWAUKEE LABOR MARKET PROJECT

City of Milwaukee

Milwaukee Public Schools

Milwaukee Area Technical College

Private Industry Council of Milwaukee County

Employment and Training Institute, University of Wisconsin-Milwaukee

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Helen Bader Foundation

This report was prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. Phone (414) 227-3388. Photos are courtesy of the University of Wisconsin-Milwaukee and the U.S. Department of Labor.



Curriculum Ideas for "Expanding Career Opportunities for University Graduates"



Introduction

This booklet is designed to help students learn about careers in high demand which require a college bachelor's degree and to explore trends creating more demand for college-educated workers. The booklet can help students (college-bound or not) use labor market information in their career planning and think about increasing their employment options in the future.

Competency: Use labor market information to help develop career goals.

1. Share the list of occupations with the largest expected numerical increases in employment in the next decade. Ask students to suggest reasons why these jobs are growing, based on the kinds of trends reported in this booklet. Discuss career ladders that might be possible with some of these jobs. [*E.g., janitors and cleaners with technical college training may become supervisors or could start their own business. Systems analysts may move into management positions.*] Which jobs have high turnover due to difficult working conditions and few chances for advancement?
2. Help students use the U.S. Department of Labor's Occupational Outlook Handbook (available in paperback or CD-ROM) to find out about careers that interest them. For each career, prepare a brief description of the work performed, qualifications for this work, and

the national job outlook. Share these findings and discuss ways students can prepare for several careers to increase their employment options after graduation.

3. Use the list of SCANS skills (U.S. Department of Labor Secretary's Commission on Achieving Necessary Skills) from the student booklet on "Thinking About the Future: Job Opportunities in the Milwaukee Labor Market" to identify workplace skills needed in various careers. Encourage students to interview workers about which skills are most important in their jobs. [*Ask students to identify which SCANS skills they think are most important for the career of "student."*]
4. Ask students to identify job titles in this booklet which have traditionally been held by women and which by men. (Or examine U.S. Census data on the percentage of men and women in each occupation.) How do the salaries of jobs traditionally held by women compare to the salaries of jobs traditionally held by men? Discuss steps individuals, government and businesses can/should take to provide a fair playing field for workers.

Jobs with Largest Expected Numerical Increase in U.S. Employment, 1994-2005

Cashiers	+ 562,000
Janitors and cleaners	559,000
Salespersons retail	532,000
Waiters and waitresses	479,000
Registered nurses	473,000
General managers and top executives	466,000
Systems analysts	445,000
Home health aides	428,000
Guards	415,000
Nursing aides, orderlies, attendants	387,000
Teachers, secondary school	386,000
Marketing and sales worker supervisors	380,000
Teacher aides and educational assistants	364,000
Receptionists and information clerks	318,000
Truck drivers	271,000
Secretaries (non-legal, non-medical)	267,000
Clerical supervisors and managers	261,000
Child care workers	248,000
Maintenance repairers, general utility	231,000
Teachers, elementary	220,000

Reading Review Questions
"Thinking About the Future: Expanding Career Opportunities for University Graduates"

1. Find several careers which require a person with talents or interests like you. Do you think you would like these jobs? Why or why not?
2. Examine the personal skills and talents needed for the careers in this booklet. What are frequently mentioned skills? How can you improve these skills while in school?
3. The Wisconsin Department of Workforce Development has developed estimates of annual job openings due to growth (creation of new jobs) or replacements (filling existing jobs for persons who retire, move into another occupation or quit). Chart the jobs in this booklet for their growth and replacement estimates. Which jobs are expanding primarily due to growth? Why? Which job openings are expected to be mainly replacement jobs? Why?
4. How many factors can you identify from the "National Job Outlook" sections that are increasing the number of jobs in high demand fields? Which of these factors are also creating a demand for jobs requiring 1-2 year technical college training (listed in the booklet "Thinking About the Future" High Demand Jobs in Technical Fields Requiring 1-2 Years of College)?
5. Identify a career not featured in this booklet (from the "Other Careers to Consider" or a job that interests you). Use the **Occupational Outlook Handbook** to find a description of the work, education and training required, and the national job outlook for this career.

Competency: Identify resources available to students interested in college education and training.

Education site offers cyberlinks and in-depth information on colleges and universities, financial aid, and career programs in the U.S.

1. Ask students to identify a career that interests them and requires a four-year college degree. Use the Internet or the school's college catalog collection to find at least 3 colleges that offer this program.
2. Help students use one of the Internet search engines to locate professional organizations for a career. Encourage students to use these Web sites to find information about current research, conferences, student associations, and job openings. (These sites may also help teachers locate local resource persons, speakers and mentors for their students.) If students do not have Internet access, write letters to professional associations (using addresses listed in the **Occupational Outlook Handbook**) requesting career information.
3. At a parent night or career day event help students and their parents access the web site <http://easi.ed.gov> to explore the process of finding a college or university, obtaining financial aid to pay for college tuition and expenses, and developing loan repayment schedules. This excellent U.S. Department of

4. Invite college students from your school district back to talk about the kinds of jobs they have taken to help support their college education. What were the advantages and disadvantages of these jobs?

This guide was prepared by the Employment and Training Institute, University of Wisconsin-Milwaukee, 161 W. Wisconsin Avenue, Suite 6000, Milwaukee, WI 53203. For more information, contact Lois Quinn, (414) 227-3388.

*Partners in the Milwaukee Labor Market Project
City of Milwaukee
Milwaukee Public Schools
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With funding support from the Milwaukee Community Outreach Partnership Center of the University of Wisconsin-Milwaukee, U.S. Department of Housing and Urban Development, and Helen Bader Foundation.

The Department of Labor talked with hundreds of employers, workers and supervisors to identify skills people need in today's workplace. Use this checklist to record projects and activities that are helping you improve your SCANS basic work skills through school, part-time work or volunteer activities.

SCANS: INTERPERSONAL SKILLS

WORK ON A TEAM

- ☐ work cooperatively with others.
- ☐ contribute to group efforts with ideas, suggestions, and effort.

TEACH OTHERS

- ☐ help others learn needed knowledge and skills.

SERVE CLIENTS/CUSTOMERS

- ☐ work with customers to satisfy their needs.
- ☐ communicate with customers to understand their expectations.

EXERCISE LEADERSHIP

- ☐ communicate your thoughts, feelings and ideas to justify your position.
- ☐ persuade and convince others.
- ☐ responsibly challenge existing procedures or policies.

NEGOTIATE TO ARRIVE AT A DECISION

- ☐ work toward agreements involving exchange of resources.
- ☐ resolve divergent interests.

WORK WITH CULTURAL DIVERSITY

- ☐ **work well with people from a variety of ethnic, social or educational backgrounds.**

SCANS: TECHNOLOGICAL SKILLS

SELECT TECHNOLOGY

- ☐ judge which sets of procedures, tools or machines, including computers and their programs, will produce the desired results.

APPLY TECHNOLOGY TO TASK

- ☐ understand the overall intent and proper procedures for setting up and operating machines, including computers + their programming systems.

MAINTAIN AND TROUBLESHOOT TECHNOLOGY

- ☐ prevent problems in machines, computers and other technologies.
- ☐ identify problems in machines, computers and other technologies.
- ☐ solve problems in machines, computers and other technologies.

NAME _____

Examples of your work:

[illegible]

NAME _____

Examples of your work:

- _____
- _____
- _____
- _____

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- _____
- _____

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