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## ABSTRACT

A survey of 10,739 employers (37 percent rate of return) was conducted in Washington state from July through September 1999 to determine training and skill needs of employers and the capacity of the state's training programs to meet those needs. In addition, research was conducted through data matching of unemployment insurance and training program records and telephone surveys with former training programs students and the employers who hired them. Some of the findings of the survey were the following: (1) nearly two-thirds of firms looking for workers during the last 12 months reported difficulty finding qualified applicants; (2) the scarcity of skilled workers affected all industries, most particularly construction and manufacturing; (3) among those reporting difficulty, nearly three-quarters of firms said the scarcity of skilled workers lowered productivity, while about two-thirds said it reduced output and sales and the quality of products and services; (4) the most serious shortage was of workers with postsecondary training, especially vocational training; (5) 9 of 10 employers had a hard time finding skilled workers with occupational-specific skills; (6) more than one-third of employers reported increasing classroom training for employees during the past 3 years; (7) 85 percent of employers provided on-the-job training; (8) nearly half of employers reported that the skills required to perform production or support or support jobs have increased during the past 3 years; and (9) nearly half of all nonsupervisory employees used computers on their jobs. (KC)

# *Workforce Training Needs and Practices of Washington State Employers*

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# WORKFORCE TRAINING AND EDUCATION COORDINATING BOARD

## The Vision

*The Workforce Training and Education Coordinating Board is Washington State's valued and trusted source of leadership for the workforce training and education system.*

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## Mission Statement

The Workforce Training and Education Coordinating Board's mission is to bring business, labor, and the public sector together to shape strategies to best meet the workforce training needs of all of Washington's students, workers, and employers in order to create and sustain a high-skill, high-wage economy.

To fulfill this mission, Board members and staff work together to:

- Advise the Governor and Legislature on workforce training and education policy.
  - Promote a system of workforce training and education that responds to the lifelong learning needs of the current and future workforce.
  - Advocate for the nonbaccalaureate training and education needs of workers and employers.
  - Facilitate innovations in policy.
  - Ensure system quality and accountability by evaluating results and supporting high standards and continuous improvement.
- 

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*This publication is available in alternative format upon request.*

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# 1999 Employer Survey Report Customer Satisfaction Survey

*The Workforce Training and Education Coordinating Board is committed to high-quality customer satisfaction and continuous improvement. You can help us meet our commitment by completing this form, detaching it, and mailing it in. Please circle the words that best answer the following questions. In the space provided please elaborate on your response, if appropriate.*

1. How useful is this report?	Not Useful	Somewhat Useful	Very Useful
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## Please Tell Us About Yourself

JOB TITLE	SECTOR Public ___ Private ___ Nonprofit ___	YOUR ZIP CODE
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Does your organization provide training services to clients?                      Yes \_\_\_                      No \_\_\_

Would you like to be contacted about future WTECB initiatives in this field?                      Yes \_\_\_                      No \_\_\_

If we have any questions about what you have written here, may we contact you?                      Yes \_\_\_                      No \_\_\_

*(If you answered "yes" to this question or question #7, please fill out the following.)*

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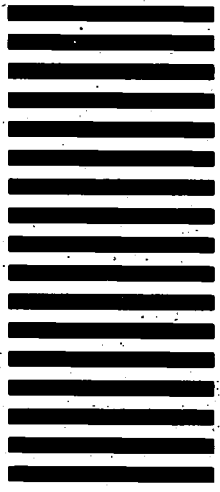


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## **The Board**

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The Workforce Training and Education Coordinating Board (WTECB) works in partnership with business, labor, local workforce development councils, and other state agencies to address the challenges facing Washington's employers and workers. The Board provides advice to the Governor and Legislature on workforce development policy and is responsible for statewide planning, coordinating, and evaluating the state's workforce development efforts. WTECB focuses on the 75 percent of the workforce who enter careers that do not require a four-year college degree.

The Board's 11 members represent business, labor, state agencies responsible for education, employment and training, and targeted populations.

## **The Board's Research Agenda**

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In order to develop policy recommendations, identify areas where training programs can make improvements, and establish expected levels of performance for training programs, WTECB has an extensive research agenda. Every two years, WTECB conducts research to determine training and skill needs of employers and the capacity of the state's training programs to meet those needs. WTECB also evaluates the outcomes of training programs in terms of employment, wages, and customer satisfaction of former students and determines employer satisfaction with the skills of new hires who were students in one of the training programs. WTECB publishes the results of its research and recommendations in two documents: "Workforce Training Results" and "Workforce Training: Supply, Demand and Gaps." WTECB expects to publish the findings of its latest research in the spring of 2000.

## **The Employer Survey**

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The employer survey was conducted from July through September 1999 and mailed statewide to 10,739 employers. A total of 3,966 employers responded to the survey, a response rate of 37 percent. This a substantial improvement over the 11 percent response from 1997.

WTECB contracted with Market Data Research of Tacoma to receive completed surveys and conducted initial analysis of the data. WTECB staff conducted additional analysis for this report by geography, size of firm, and economic sector. Sample weights are used to make the results representative of all employers in the state with two or more employees covered by unemployment insurance as reported to the state Employment Security Department. The survey excludes federal employers and firms with fewer than two employees.

The employer survey is only a part of the research conducted on the workforce development system by WTECB. Other research includes data matching of unemployment insurance and training program records and phone surveys with former training program students and the employers who hired them.



## Statewide Survey Highlights

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- Nearly two-thirds of firms looking for workers during the last 12 months report difficulty finding qualified applicants. Larger firms and firms in the Puget Sound area are most likely to report difficulty.
- The scarcity of skilled workers affects all industries, most particularly construction and manufacturing.
- Among those reporting difficulty, nearly three-quarters of firms said the scarcity of skilled workers lowers productivity, while about two-thirds said it reduces output and sales, and the quality of their products and services.
- The most serious shortage is for workers with postsecondary training. The scarcity of workers with postsecondary vocational training affects more firms (24,000) than any other education credential.
- Among those reporting difficulty, nine out of 10 employers have a hard time finding skilled workers with occupation-specific skills.
- More than one-third of employers report increasing classroom training for employees during the past three years.
- Eighty-five percent of employers provide on-the-job training.
- Nearly half of all employers report that skills required to adequately perform production or support jobs increased during the past three years. Three-quarters of high-tech firms and more than half of the firms in the service sector report increased skill requirements.
- Nearly half of all nonsupervisory employees use computers on their jobs.

## Scarcity of Skilled Workers

### Question

*In the last 12 months, did your firm have any difficulty finding qualified applicants for jobs you were trying to fill?*

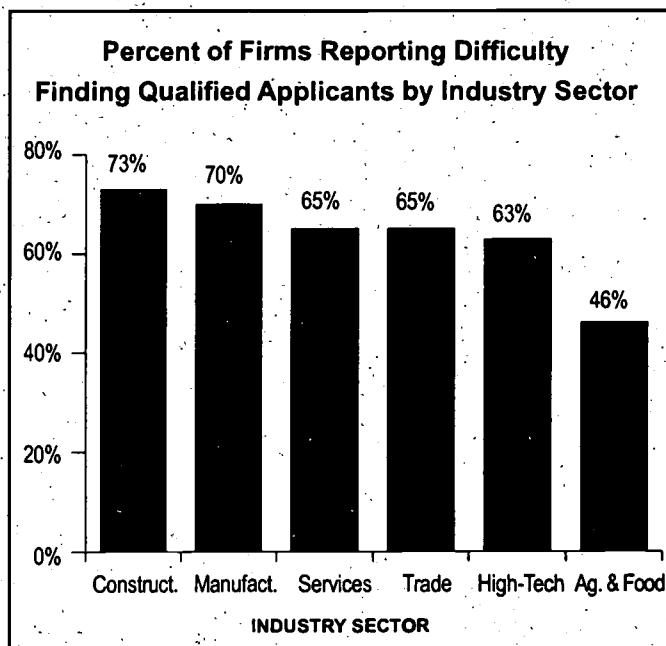
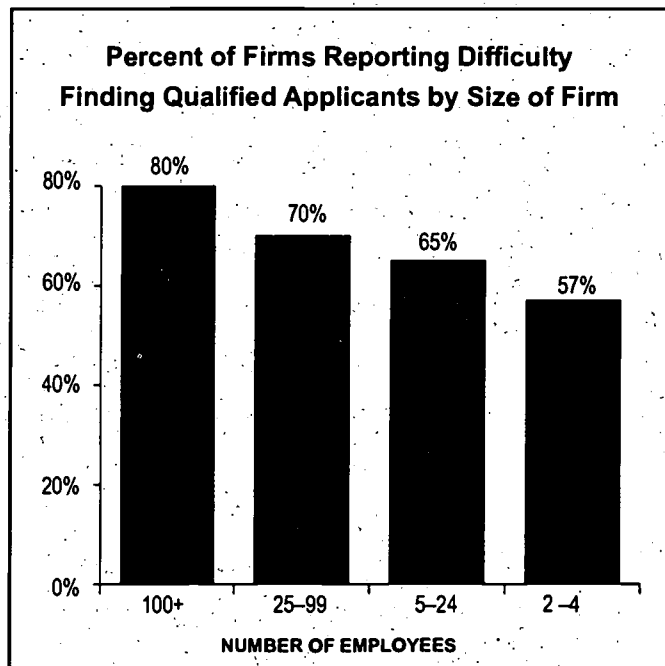
**Sixty-four percent** of firms looking for workers<sup>1</sup> during the last twelve months **report difficulty finding qualified applicants**. This represents an estimated 60,750 Washington State employers.

While the problem affects firms of all sizes, **larger firms are more likely to report difficulty**.

The difficulty is not isolated to high-tech firms;<sup>2</sup> rather the **scarcity of skilled workers impacts all industries**.

<sup>1</sup>This includes firms that hired new employees or did not hire because of difficulty in finding qualified applicants (i.e., did not hire but reported difficulty).

<sup>2</sup>High-tech includes biotechnology (SIC 2833-2836); computers and equipment (SIC 3571-3579); electronics (SIC 3612-3699); precision equipment and instruments (SIC 3812-3873); telephone communications (SIC 4812-4813); computer programming, software, and maintenance (SIC 7371-7379); research and testing (SIC 8731-8733).

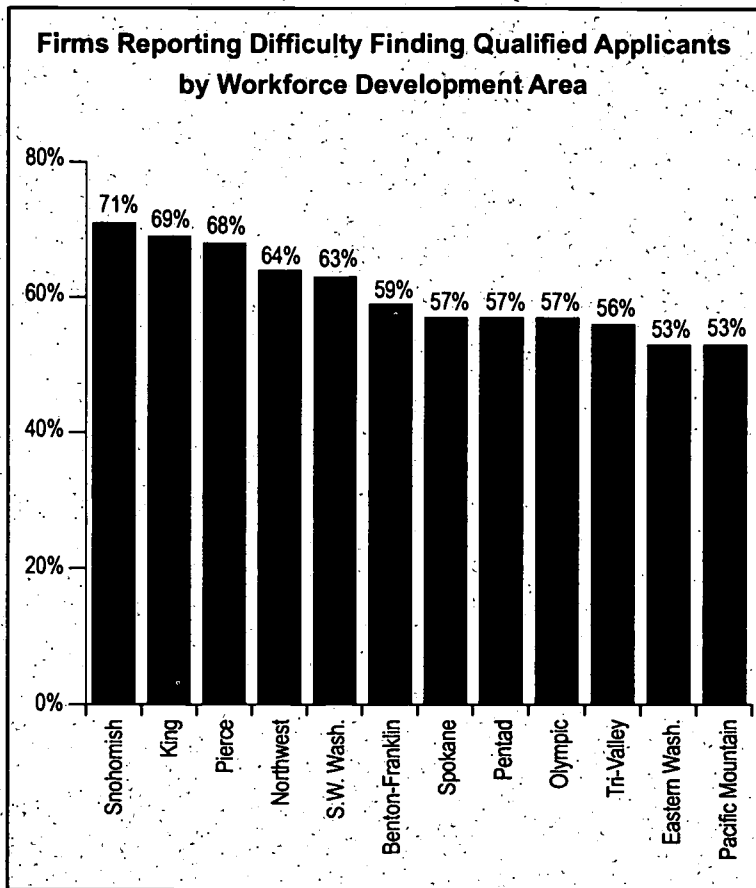


Employers in all parts of Washington report difficulty, but the most severe scarcity is in the Puget Sound's booming economy.

The ten most frequently reported occupations for which employers had the most difficulty finding qualified applicants (in order of difficulty):

1. Sales
2. Cook/Food Service Worker
3. Laborer
4. Administrative Secretary
5. (tie) Personal Health Care Worker (i.e., Certified Nursing Assistant, Registered Nurse)
5. (tie) Driver
7. Carpenter
8. Mechanic
9. Construction Worker
10. Computer Technician

(For a synopsis of required education and training, expected growth, and approximate monthly wages for typical jobs in these occupations, see page 18.)



**Counties in Workforce Development Areas**

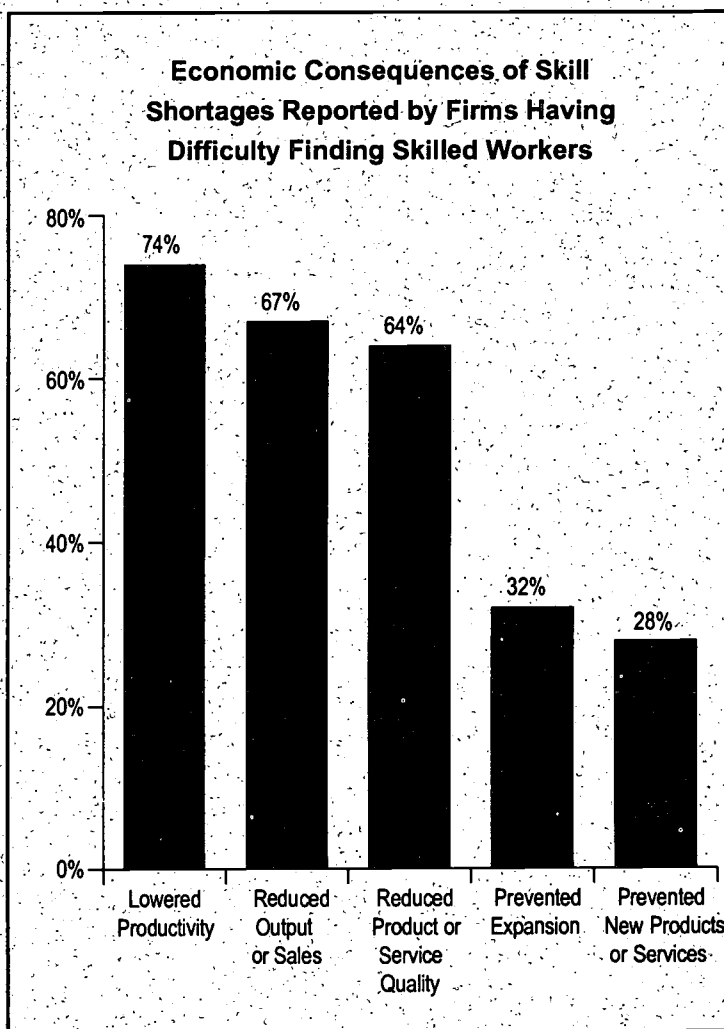
<p><b>Northwest Washington</b> <i>Island, San Juan, Skagit, Whatcom</i></p>	<p><b>Tri-Valley</b> <i>Kittitas, Klickitat, Yakima</i></p>
<p><b>Southwest Washington</b> <i>Clark, Cowlitz, Skamania, Wahkiakum</i></p>	<p><b>Eastern Washington</b> <i>Asotin, Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Stevens, Walla Walla, Whitman</i></p>
<p><b>Pentad</b> <i>Chelan, Douglas, Grant, Okanagon</i></p>	<p><b>Pacific Mountain</b> <i>Grays Harbor, Lewis, Mason, Pacific, Thurston</i></p>
<p><b>Olympic</b> <i>Clallam, Jefferson, Kitsap</i></p>	

## Economic Costs of Skill Shortages

### Question to Firms Reporting Difficulty

*Which of the following has resulted from your firm's difficulty in finding qualified applicants?*

The scarcity of skilled workers has severe consequences on Washington's firms—lowered productivity, reduced output or sales, and reduced quality. Among firms having difficulty finding qualified applicants, 74 percent (an estimated 41,600 firms) report that productivity was lowered, 67 percent report reduced output or sales, and 64 percent claim that quality suffered.



## Difficulty Finding Applicants by Level of Education

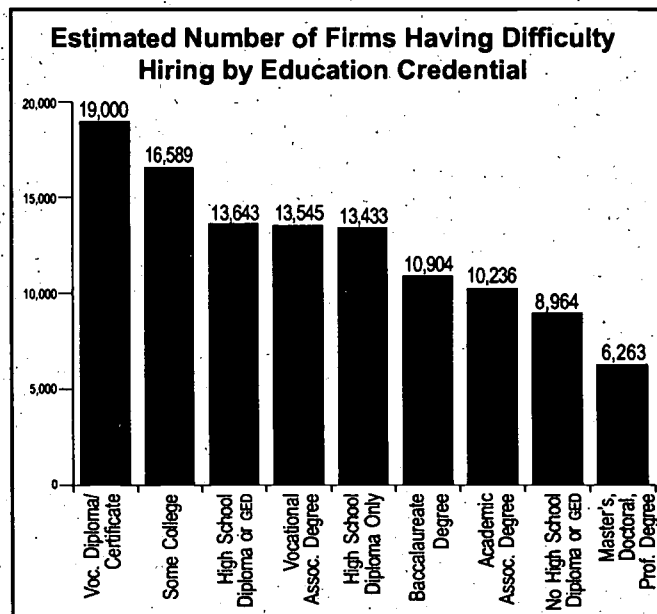
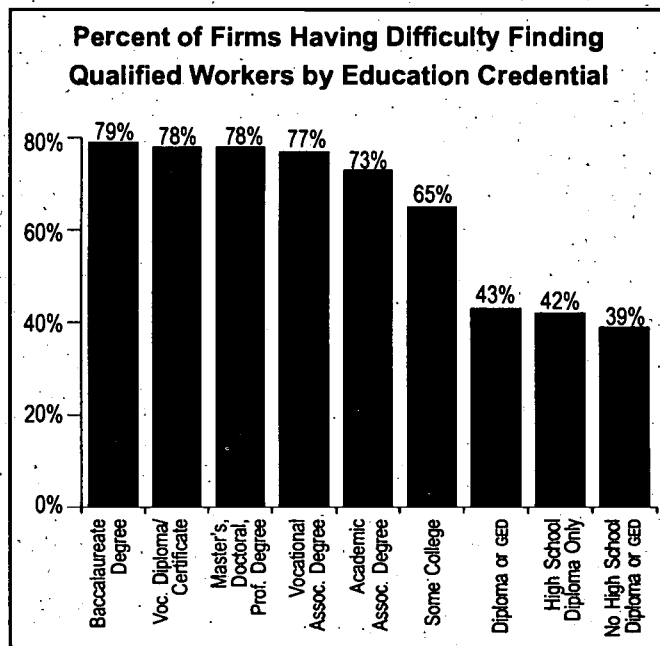
### Question to Those Reporting Difficulty Finding Qualified Applicants

*In general, how much difficulty has your firm experienced in the last 12 months finding qualified applicants with the different education levels listed below?*

The strong economy has created a general labor shortage. Firms even have trouble finding applicants with only a high school credential. Among firms reporting difficulty finding qualified applicants, 42 percent have difficulty finding workers with a high school diploma.

However, the more serious problem is the scarcity of workers with postsecondary training, as opposed to a general shortage of laborers. Among firms having difficulty finding qualified workers, roughly 77 percent report difficulty finding workers with a vocational certificate or vocational associate degree.

Moreover, the scarcity of workers with postsecondary vocational training affects more firms than are affected by shortages of other workers—an estimated 24,000 firms have difficulty finding applicants with either vocational certificates or vocational associate degrees.

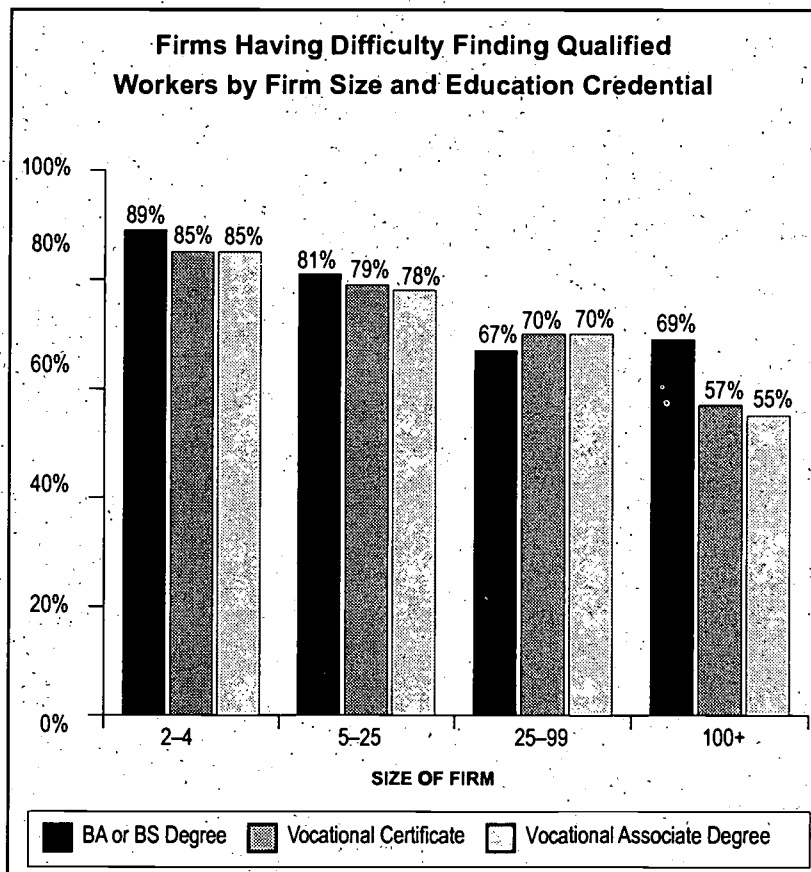


Firms in all industries have difficulties finding workers with postsecondary vocational training. The severity of the problem varies by industry.

**Firms Reporting Difficulty Finding Qualified Applicants  
by Industry and Education Credential**

INDUSTRY	HIGH SCHOOL DIPLOMA OR GED	VOCATIONAL CERTIFICATE/ DIPLOMA	VOCATIONAL ASSOCIATE DEGREE	ACADEMIC ASSOCIATE DEGREE	BA, BS DEGREE
Agriculture & Food	60%	87%	90%	78%	61%
Manufacturing	39%	87%	88%	77%	61%
Construction	46%	82%	89%	88%	93%
Trade	50%	74%	73%	63%	79%
Services	39%	79%	77%	77%	79%
High-Tech	17%	63%	66%	67%	85%

Smaller firms are less likely than larger firms to report overall difficulty finding qualified applicants. However, among those that do, they are more likely than large firms to report difficulty finding workers with postsecondary training. Evidently, **smaller firms have a harder time competing for the more educated workers who are in short supply.**



## Difficulty Finding Workers Who Have Certain Abilities and Skills

Among the firms that report having difficulty, **the most commonly cited problem is finding applicants who have the required occupation-specific skills.** Firms are also likely to report difficulty finding applicants with problem solving skills, positive work habits, communication, and team work skills.

<b>Firms Reporting Difficulty Finding Qualified Applicants With Specific Skills and Abilities</b>	
<b>ABILITY OR SKILL</b>	
Occupation-Specific Skills.....	91%
Problem Solving or Critical Thinking Skills .....	90%
Positive Work Habits and Attitudes .....	85%
Communication Skills .....	83%
Team Work Skills .....	80%
Adaptability to Change in Duties and Responsibilities .....	78%
Computer Skills .....	78%
Ability to Accept Supervision .....	70%
Math Skills .....	64%
Writing Skills .....	59%
Reading Skills .....	40%

## Classroom Training That Firms Provide

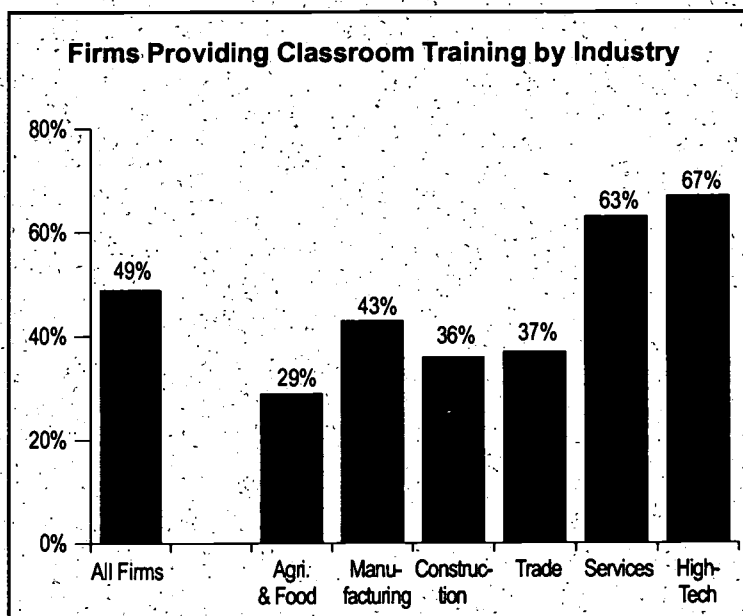
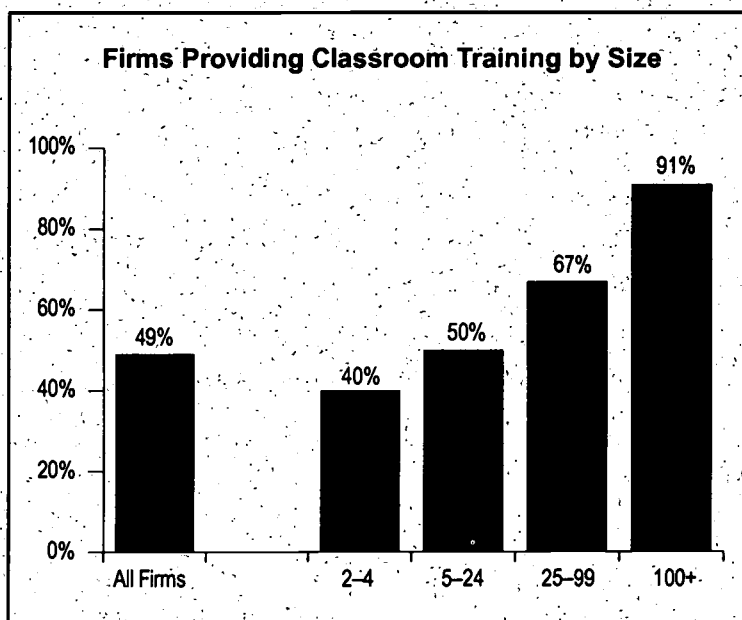
### Question

*Did your firm provide or pay for any classroom training, workshops, or seminars (lasting at least 4 hours) for any employees in the last 12 months?*

▶ Almost half of all firms provide or pay for some classroom training.

▶ Large firms are more likely to do so than are small firms.

▶ High-tech and service sector firms are especially likely to provide classroom training.





### Three Broad Categories of Classroom Training

1. Training in workplace practices
2. Basic skills training (reading, writing, math, and English language skills)
3. Training in job-specific skills.

Among the firms that provided classroom training, 83 percent provided such training in job-specific skills, 68 percent provided it for workplace practices, and only 13 percent provided it for basic skills.

**Thirty-eight percent of firms report that the percentage of their workers who receive classroom training increased in the past three years.** Firms increased classroom training for a number of reasons—changes in technology and products, the need to improve the quality of output, a desire to promote the career development of employees, and increasing the productivity and flexibility of the workforce.

**Among the firms that do not provide classroom training, 90 percent report the reason for not doing so is that on-the-job training satisfies their needs.**

**The incidence of classroom training varies by occupation. It is especially high among managers and technical staff.**

<b>Workers Receiving Classroom Training</b> <i>(weighted to reflect all workers in the state)</i>	
TYPE OF EMPLOYEE	
Managers and Administrators .....	61%
Professionals .....	39%
Technical and Paraprofessional <i>(technicians, programmers, technical support staff)</i> .....	47%
Marketing and Sales Staff .....	35%
Clerical and Administrative Support Staff .....	41%
Service Occupations <i>(protective services, food service, health assistance, cleaning, personal)</i> .....	28%
Production, Construction, Operation Maintenance .....	36%

## On-the-Job Training

During on-the-job training, a worker learns from someone else the duties that the job requires while performing work. One example is having a coworker teach an employee how to operate a machine. Another example is having someone show a new employee the bookkeeping system.

**Eighty-five percent of firms report that they provide on-the-job training.** The incidence of on-the-job training is high across all industries.

The incidence of on-the-job training also varies by occupation.

### Workers Receiving On-the-Job Training (weighted to reflect all workers in the state)

#### TYPE OF EMPLOYEE

Managers and Administrators .....	38%
Professionals .....	21%
Technical and Paraprofessional (technicians, programmers, technical support staff) .....	34%
Marketing and Sales Staff .....	31%
Clerical and Administrative Support .....	48%
Service Occupations (protective services, food service, health assistance, cleaning, personal) .....	32%
Production, Construction, Operation, Maintenance .....	39%

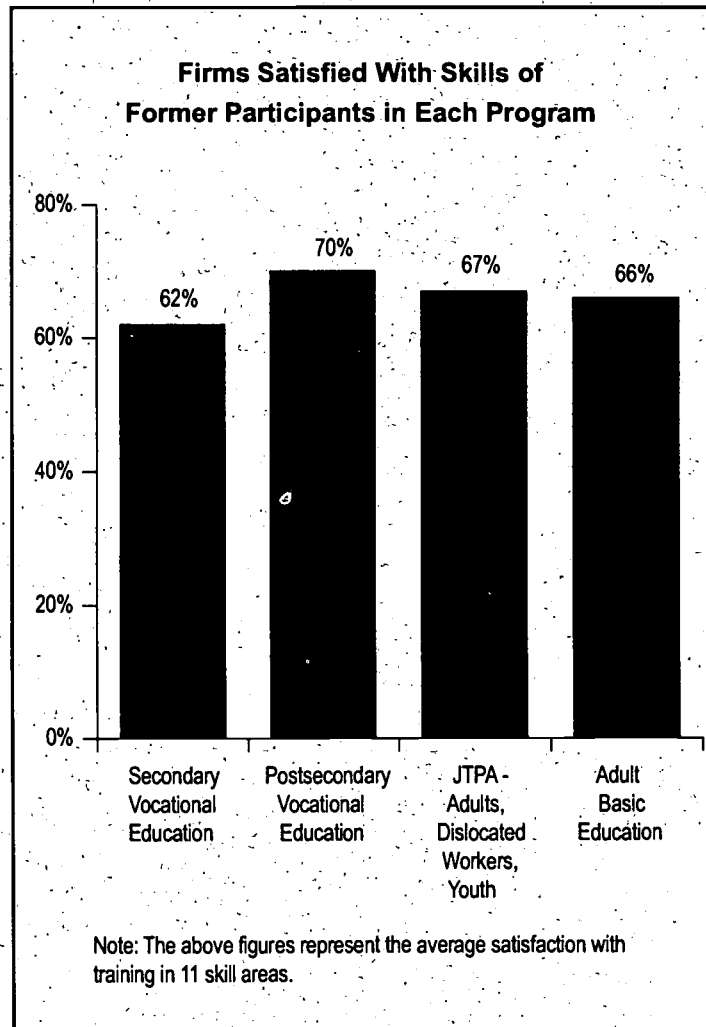
## Satisfaction with Training

### Question

*How satisfied was your firm with each of the skills listed below of new employees who had recently completed a secondary vocational-technical education, postsecondary community or technical college vocational-technical education, Job Training Partnership Act (JTPA) program, or adult basic education training program?*

About two-thirds of employers were satisfied with the new employees who recently completed one of the state's major workforce training programs. This means that one-third were not satisfied.

**Seventy percent of employers were satisfied with new employees who had completed a vocational program at one of the state's community or technical colleges.**



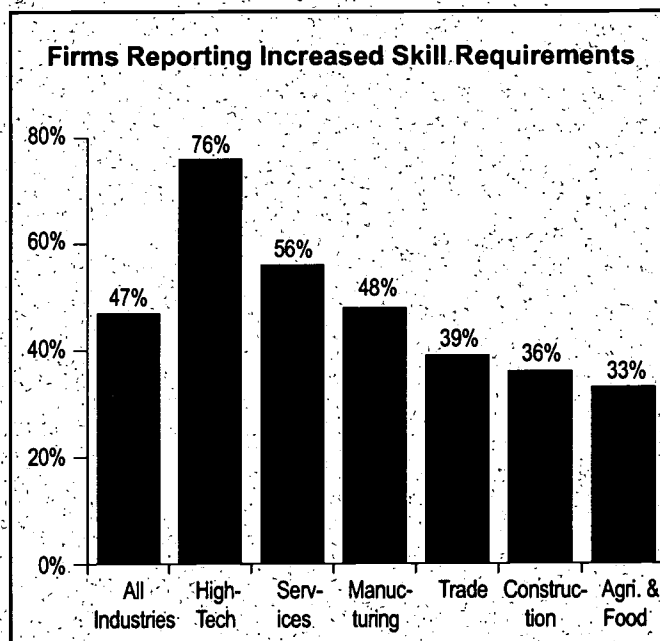
## The Future

### Question

*In the last three years, have the skills required to adequately perform production or support jobs increased, decreased, or remained the same?*

**Forty-seven percent of firms report that the skills required to adequately perform production or support jobs increased during the past three years.**

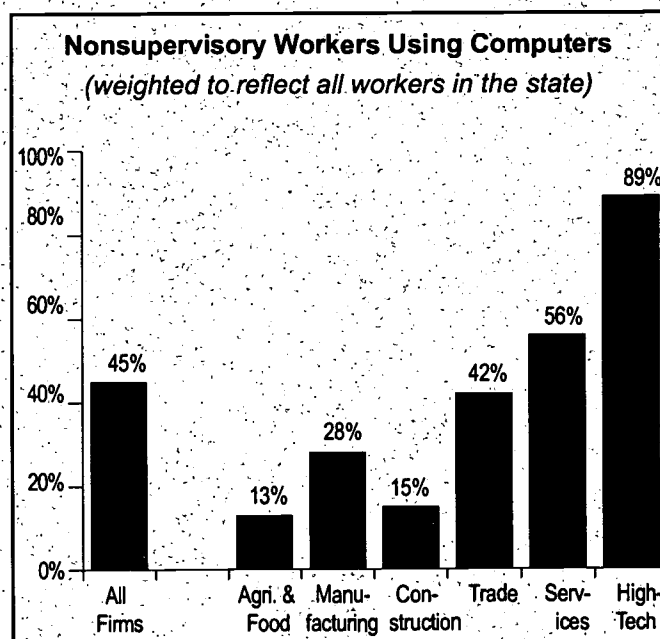
Firms in the high-tech and service sectors were especially likely to report that skill requirements have increased.



### Question

*What percentage of your nonsupervisory employees uses computers in their jobs?*

One reason that skill requirements have increased is that **computer usage has become very common, even among nonsupervisory employees.** This is especially true in the high-tech, service, and trade sectors.



**Another factor that increases skill requirements is the adoption of high-performance work organization practices.** In order to survive in a constantly changing marketplace, firms must pursue a strategy of market flexibility and responsiveness. They must rely on employees who can adjust business processes quickly to move in a new direction. The high-performance strategy can only be an option when the employer is either willing to support formal or informal learning on the job, or where there is already an adequate supply of skilled workers.

**Firms Using High-Performance Practices**

**HIGH-PERFORMANCE PRACTICES—YES**

Train employees to do a number of different jobs (cross training) .....	84%
Organize regular meetings with managers and workers to discuss ways to improve workplace practices .....	59%
Link compensation to performance .....	58%
Organize employees in self-managed work teams .....	44%
Compare firm's practices and performance with that of other firms (benchmarking) .....	42%
Regularly rotate employees among jobs (job rotation) .....	33%
Involve coworker review of employee performance .....	28%
Formal job sharing or flex time .....	20%
Formal Total Quality Management or Continuous Quality Improvement program .....	20%
Manage just-in-time inventories .....	18%
Use quality circles .....	8%

**Question**

*How will your firm's need for employees with each of the types of education listed below change in the next five years?*

Skill requirements will continue to increase. As a result, **firms expect their needs for workers with postsecondary training to increase during the next five years.** Unless supply increases, the skill gap could worsen.

EDUCATIONAL LEVEL	INCREASE	STAY THE SAME	DECREASE
No High School Diploma or GED	11%	74%	15%
GED or High School Diploma	16%	79%	5%
High School Diploma Only	13%	82%	6%
Some College Course Work	33%	65%	3%
Vocational Diploma or Certificate	36%	62%	3%
Vocational Associate Degree	27%	69%	3%
Academic Associate Degree	27%	71%	3%
Baccalaureate Degree	33%	65%	3%
Master's, Doctoral, or Professional Degree	24%	70%	6%

The need for workers with postsecondary education and training is expected to increase in all sectors of the economy.

**Manufacturing, construction, and high-tech firms are especially likely to report expected increases in demand for workers with vocational certificates.**

High-tech and manufacturing firms are especially likely to report expected increases in demand for workers with associate degrees.

EDUCATIONAL LEVEL	AGRICULTURE	MANUFACTURING	CONSTRUCTION	TRADE	SERVICES	HIGH-TECH
Some College Work	28%	34%	31%	34%	33%	38%
Vocational Diploma or Certificate	35%	45%	43%	35%	34%	40%
Vocational Associate Degree	30%	36%	28%	22%	29%	41%
Academic Associate Degree	26%	23%	28%	24%	29%	35%
Baccalaureate Degree	27%	29%	27%	26%	35%	57%

**Occupations Employers Have the Most Difficulty Filling**

OCCUPATIONS IDENTIFIED BY RESPONDING EMPLOYERS WITH EXAMPLES OF TYPICAL JOBS IN EACH OCCUPATIONAL FIELD	EDUCATION OR TRAINING REQUIRED	GROWTH EXPECTED 1999-2006	APPROXIMATE MONTHLY WAGES
1. <b>Sales</b> Retail Sales; Sales Representative	2-4 yrs. postsecondary training/education	14-19%	\$988-\$5,344+
2. <b>Cook, Chef, Food Service Worker</b>	2-3 yrs. postsecondary vocational training	18-22%	\$896-\$2,200+
3. <b>Laborer</b> Warehouse Worker	2-3 yrs. postsecondary vocational training	17%	\$988-\$2,917
4. <b>Administrative Secretary</b> Secretary, Legal Secretary, Medical Secretary	2-3 yrs. postsecondary vocational training	14-16%	\$1,000-\$3,660
5. (tie) <b>Personal Health Care Worker</b> Registered Nurse	2-4+ yrs. postsecondary training/education	16%	\$1,700-\$5,000
Nursing Assistant	2-3 yrs. postsecondary vocational training	22%	\$988-\$2,290
5. (tie) <b>Driver</b> Local driver Long-haul driver	2-3 yrs. postsecondary vocational training	13-14%	\$988-\$3,467
7. <b>Carpenter</b>	2-3 yrs. postsecondary vocational training	13%	\$1,125-\$3,990
8. <b>Mechanic</b> Automotive, Heating-Cooling Systems, Truck & Heavy Equipment	2-3 yrs. postsecondary vocational training	13-23%	\$896-\$3,830
9. <b>Construction Worker</b>	1-3 yrs. postsecondary vocational training	14%	\$988-\$2,300
10. <b>Computer Technician</b>			
Computer Service Technician	2-3 yrs. postsecondary vocational training	53%	\$1,200-\$4,006
Computer Network Administrator	2-4+ yrs. postsecondary training/education	25%	\$1,730-\$4,433
Computer Systems Analyst	4+ yrs. postsecondary training/education	not surveyed	\$2,080-\$4,356

Labor Market Information from the Washington Occupational Information System and the State Employment Security Department, published in *Plan for Tomorrow Today, a Guide to Careers-Occupations in Washington State*, November 1999, by the State Workforce Training and Education Coordinating Board. Percentage of growth reflects anticipated growth for each occupation. Wages figures represent the average pay range (entry level to experienced) excluding benefits for full-time work. Wage rates may vary with the number of years of experience. 12/99

# **Local Workforce Area Highlights**

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## Benton-Franklin Local Workforce Area Survey Highlights

Fifty-eight percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 68 percent said it lowers productivity.
- 66 percent said it reduces the quality of their products and services.
- 62 percent said it reduces output and sales.

More employers have difficulty finding workers with some college beyond high school (estimated 530 employers) and workers with a vocational certificate (estimated 473 employers) than any other education credential.

Employers expect during the next 5 years their need for new workers with a bachelor degree will increase by 41 percent, and workers with a vocational certificate will increase by 39 percent, more than for any other education credential.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Administrative Secretary  
Personal Health Care Worker  
Cook and Food Service Worker  
Construction Worker  
Sales  
Driver  
Laborer

Among those reporting difficulty 91 percent of employers have a hard time finding workers with occupation-specific skills, 90 percent with problem solving and critical thinking skills, and 90 percent with positive work habits and attitudes.

Forty-six of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-two percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are changes in technology, 81 percent; improving the quality of products and services, 73 percent; and improving productivity, 71 percent.

Eighty-eight percent of employers report they provide on-the-job training for employees.

## Eastern Washington Local Workforce Area Survey Highlights

*The Eastern Washington Local Workforce Area includes Asotin, Columbia, Ferry, Garfield, Lincoln, Pend Oreille, Stevens, Walla Walla, and Whitman counties.*

Fifty-three percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 58 percent said it lowers productivity.
- 54 percent said it reduces the quality of their products and services.
- 51 percent said it reduces output and sales.

More employers have difficulty finding workers with some college beyond high school (estimated 297 employers) and workers with a bachelor degree (estimated 294) than any other education credential.

Employers expect during the next 5 years their need for new workers with a vocational certificate will increase by 35 percent, more than for any other education credential.

Among those reporting difficulty, 93 percent of employers have a hard time finding workers with occupation-specific skills.

Forty-seven percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-five percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are changes in technology, 87 percent; changes in products and services provided, 79 percent; and improving quality of products and services, 78 percent.

Eighty-three percent of employers report they provide on-the-job training for employees.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Administrative Secretary  
Cook and Food Service Worker  
Laborer  
Manager  
Computer Technician  
Personal Health Care Worker  
Cosmetologist/Hair Stylist  
Driver  
Customer Service

**North Central Washington/Columbia Basin  
Local Workforce Area Survey Highlights**

*The North Central Washington/Columbia Basin Local Workforce Area includes Chelan, Douglas, Grant, and Okanagon counties.*

Fifty-seven percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 67 percent said it lowers productivity.
- 63 percent said it reduces the quality of their products and services.
- 60 percent said it reduces output and sales.

More employers have difficulty finding workers with some college beyond high school (estimated 695 employers) and workers with a vocational certificate (estimated 684 employers) than any other education credential.

Employers expect during the next 5 years their need for new workers with some college beyond high school will increase by 40 percent, more than for any other education credential.

<b>Occupations in Which Employers Have the Most Difficulty Finding Skilled Workers</b> <i>(in order of difficulty)</i>
Farmers and Agriculture Worker
Cook and Food Service Worker
Sales
Laborer
Cashier
Accounting
Administrative Secretary
Driver
Personal Health Care Worker

Among those reporting difficulty, 95 percent of employers have a hard time finding workers with problem solving and critical thinking skills, 94 percent with occupation-specific skills, and 93 percent with positive work habits and attitudes.

Forty-one of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-five percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are changes in technology, 87 percent; and improving quality of products and services, 81 percent.

Eighty-four percent of employers report they provide on-the-job training for employees.

## Northwest Washington Local Workforce Area Survey Highlights

*The Northwest Washington Local Workforce Area includes Island, San Juan, Skagit, and Whatcom counties.*

Sixty-eight percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 74 percent said it lowers productivity.
- 67 percent said it reduces the quality of their products and services.
- 66 percent said it reduces output and sales.

More employers have difficulty finding workers with a vocational certificate (estimated 909 employers) and workers with some college beyond high school (estimated 908 employers) than any other education credential.

Employers expect during the next five years their need for new workers with some college beyond high school or a vocational certificate each will increase by 34 percent, more than for any other education credential.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Cook and Food Service Worker

Construction Worker

Sales

Laborer

Engineering Technician

Among those reporting difficulty, 90 percent of employers have a hard time finding workers with occupation-specific skills.

Forty-nine percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-four percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are promoting career development of workers, 81 percent; new hires lacking necessary skills, 78 percent; and improving quality of products and services, 77 percent.

Eighty-seven percent of employers report they provide on-the-job training for employees.

## Olympic Local Workforce Area Survey Highlights

*The Olympic Local Workforce Area includes Clallam, Jefferson, and Kitsap counties.*

Fifty-seven percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 72 percent said it lowers productivity.
- 64 percent said it reduces output and sales.
- 57 percent said it reduces the quality of their products and services.

More employers have difficulty finding workers with a vocational certificate (estimated 630 employers) than any other education credential.

Employers expect during the next five years their need for new workers with a vocational certificate will increase by 39 percent, more than for any other education credential.

Among those reporting difficulty, 90 percent of employers have a hard time finding workers with occupation-specific skills.

Fifty percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-nine percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are changes in technology, 82 percent; promoting career development of workers, 77 percent; and improving quality of products and services, 71 percent.

Eighty-five percent of employers report they provide on-the-job training for employees.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Administrative Secretary  
Cook and Food Service Worker  
Sales  
Mechanic  
Driver  
Maintenance Worker

## Pacific Mountain Local Workforce Area Survey Highlights

*The Pacific Mountain Local Workforce Area includes Grays Harbor, Lewis, Mason, Pacific, and Thurston counties.*

Fifty-three percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 68 percent said it lowers productivity.
- 65 percent said it reduces the quality of their products and services.
- 62 percent said it reduces output and sales.

More employers have difficulty finding workers with a vocational certificate (estimated 1,045 employers) than any other education credential.

Employers expect during the next 5 years their need for new workers with a vocational certificate will increase by 33 percent, more than for any other education credential.

Among those reporting difficulty, 93 percent of employers have a hard time finding workers with occupation-specific skills.

Forty-six percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Forty percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are changes in technology, 80 percent; promoting the career development of workers, 80 percent; and developing a more flexible and versatile workforce, 79 percent.

Eighty-seven percent of employers report they provide on-the-job training for employees.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Computer Technician  
Cook and Food Service Worker  
Sales  
Driver  
Laborer

## Pierce County Local Workforce Area Survey Highlights

Sixty-eight percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 69 percent said it lowers productivity
- 62 percent said it reduces output and sales
- 60 percent said it reduces the quality of their products and services.

More employers have difficulty finding workers with a vocational certificate (estimated 1,614 employers) than any other education credential.

Employers expect during the next 5 years their need for new workers with a vocational certificate will increase by 44 percent, more than for any other education credential.

Among those reporting difficulty, 90 percent of employers have a hard time finding workers with occupation-specific skills.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Cook and Food Service Worker

Sales

Personal Health Care Worker

Construction Worker

Administrative Secretary

Driver

Electrician

Manager

Forty-nine percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-six percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are promoting career development of workers, 89 percent; improving the quality of products and services, 75 percent; and developing a more flexible and versatile workforce, 73 percent.

Eighty-four percent of employers report they provide on-the-job training for employees.

## Seattle-King County Local Workforce Area Survey Highlights

Sixty-nine percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 81 percent said it lowers productivity.
- 73 percent said it reduces output and sales.
- 66 percent said it reduces the quality of their products and services.

More employers have difficulty finding workers with a vocational associate degree (estimated 8,435 employers) and workers with a vocational certificate (estimated 6,655 employers) than any other education credential.

Employers expect during the next 5 years their need for new workers with bachelor degrees and vocational certificates each will increase by 33 percent, more than for any other education credential.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Computer Technician  
Personal Health Care Worker  
Cook and Food Service Worker  
Sales  
Mechanic  
Laborer

Among those reporting difficulty, 91 percent of employers have a hard time finding workers with problem solving and critical thinking skills, while 90 percent had problems finding workers with occupation-specific skills.

Forty-seven percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-nine percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are changes in technology, 92 percent; improving productivity, 85 percent; and improving the quality of their products and services, 84 percent.

Eighty-five percent of employers report they provide on-the-job training for employees.



## Snohomish County Local Workforce Area Survey Highlights

Seventy-one percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 70 percent said it lowers productivity.
- 69 percent said it reduces output and sales.
- 67 percent said it reduces the quality of their products and services.

More employers have difficulty finding workers with a some college beyond high school (estimated 1,827 employers) and workers with a vocational certificate (estimated 1,610 employers) than any other education credential.

Employers expect during the next 5 years their need for new workers with a vocational certificate will increase by 41 percent, more than for any other education credential.

Among those reporting difficulty, 93 percent of employers have a hard time finding workers with occupation-specific skills, and 92 percent had a problem finding workers with problem solving and critical thinking skills.

Forty-five percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Forty-three percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are promoting career development of workers, 87 percent; new hires lacking necessary skills, 82 percent; and changes in technology, 80 percent.

Eighty-seven percent of employers report they provide on-the-job training for employees.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Sales  
Administrative Secretary  
Cook and Food Service Worker  
Laborer  
Carpenter  
Construction Worker  
Mechanic  
Computer Technician  
Personal Health Care Worker

## Southwest Washington Local Workforce Area Survey Highlights

*The Southwest Washington Local Workforce Area includes Clark, Cowlitz, Skamania, and Wahkiakum counties.*

Sixty-three percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 66 percent said it lowers productivity.
- 64 percent said it reduces output and sales.
- 60 percent said it reduces the quality of their products and services.

More employers have difficulty finding workers with a vocational certificate (estimated 1,155 employers) and workers with some college beyond high school (estimated 1,097) than any other education credential.

Employers expect during the next five years their need for new workers with some college beyond high school will increase by 41 percent, and for those with vocational certificates by 40 percent, more than for any other education credential.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Driver

Sales

Administrative Secretary

Carpenter

Laborer

Among those reporting difficulty, 93 percent had problems finding workers with occupation-specific skills, while 92 percent had a hard time finding workers with problem solving and critical thinking skills.

Fifty percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Forty-five percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are changes in technology, 81 percent; improving the quality of their products and services, 79 percent; and promoting career development of workers, 79 percent.

Eighty-six percent of employers report they provide on-the-job training for employees.

## Spokane City-County Local Workforce Area Survey Highlights

Fifty-seven percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 73 percent said it lowers productivity.
- 59 percent said it reduces output and sales.
- 59 percent said it reduces the quality of their products and services.

More employers have difficulty finding workers with a vocational certificate (estimated 1,148 employers) than any other education credential.

Employers expect during the next 5 years their need for new workers with a vocational certificate and workers with a bachelor degree each will increase by 32 percent, more than for any other education credential.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Administrative Secretary

Manager

Cook and Food Service Worker

Sales

Mechanic

Machinist

Among those reporting difficulty, 95 percent of employers have a hard time finding workers with occupation-specific skills.

Forty-seven of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-nine percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are improving the quality of products and services, 87 percent; improving productivity, 86 percent; and changes in technology, 83 percent.

Eighty-eight percent of employers report they provide on-the-job training for employees.

## Tri-County Local Workforce Area Survey Highlights

*The Tri-County Local Workforce Area includes Kittitas, Klickitat, and Yakima counties.*

Fifty-six percent of firms looking for workers during the last twelve months report difficulty finding qualified applicants.

Among firms reporting a scarcity of qualified applicants:

- 79 percent said it lowers productivity.
- 71 percent said it reduces the quality of their products and services.
- 70 percent said it reduces output and sales.

More employers have difficulty finding workers with a vocational certificate (estimated 985 employers) than any other education credential.

Employers expect during the next 5 years their need for new workers with vocational certificates will increase by 35 percent, and workers with a bachelor degree by 34 percent, more than for any other education credential.

Among those reporting difficulty, 94 percent of employers have a hard time finding workers with occupation-specific skills.

Forty-six percent of all employers report that skills required to adequately perform production or support jobs increased during the past three years.

Thirty-five percent of employers report increasing classroom training for employees during the past three years.

Top reasons employers report for increasing training are promoting career development of workers, 86 percent; and changes in technology, 85 percent.

Eighty-one percent of employers report they provide on-the-job training for employees.

**Occupations in Which Employers  
Have the Most Difficulty Finding Skilled Workers**  
*(in order of difficulty)*

Farmers and Agriculture Workers

Laborer

Sales

Cook and Food Service Worker

Administrative Secretary

Carpenter

Construction Worker

Maintenance



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