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ABSTRACT

In Washington, urban centers enjoy rising wages and low employment; rural areas have stagnating wages and high unemployment. Most family-wage job opportunities are in occupations that require some postsecondary education but not a four-year degree. The shortage is most severe in the supply of skilled workers with vocational training. Technology demands higher skills; high performance work organizations need workers who can think. Two population trends challenge the state's ability to meet the demand for skilled workers. Growth in the work force is slowing, and an increasing number of new entrants come from populations that traditionally receive less education: people of color, economically disadvantaged, women, and people with disabilities. The work force training system must adapt to the growing diversity of workers and prepare the coming generation of young workers for full participation in the world of work. Facing these challenges is a system encompassing 16 state and federal programs, hundreds of education institutions and training providers, and thousands of students, workers, and employers. A set of four long-term goals, objectives for the next 2 years, and specific actions have been defined. The goals are as follows: to prepare students for further education and work; to close the gap between economic demand and the supply of postsecondary technical training; to make the training system a coherent and integrated system of customer services; and to hold training programs accountable for results. (YLB)

High Skills, High Wages

Washington's Comprehensive Plan for Workforce Training and Education

1998

Washington State
Workforce Training
and Education
Coordinating Board

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.

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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Betty Jane Narver
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State Superintendent of Public Instruction

Geraldine Coleman
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State Employment Security Department

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High Skills, High Wages

Washington's Comprehensive Plan for Workforce Training and Education

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1998

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December 1998

Governor Locke and Members of the Legislature:

We are pleased to forward the 1998 update to "High Skills, High Wages: Washington's Comprehensive Plan for Workforce Training and Education."

The plan builds upon work we began in 1994 and have continued since. It suggests the next steps we need to take if our citizens and firms are to thrive in an ever-changing economy.

The plan proposes four long-term goals for the state's workforce training and education system:

- K-12 education will prepare students for both further education and work.
- The gap between economic demand and the supply of postsecondary technical training will be closed.
- The training system will be a coherent and integrated system of customer services.
- Training programs will be accountable for results.

To accomplish these goals, the plan recommends objectives and specific actions designed to make the system more responsive to the needs of students, families, workers, and employers during the next two years. We also will be taking advantage of the changes offered to us in new federal legislation to continue our progress in improving coordination, accountability, and customer access and satisfaction.

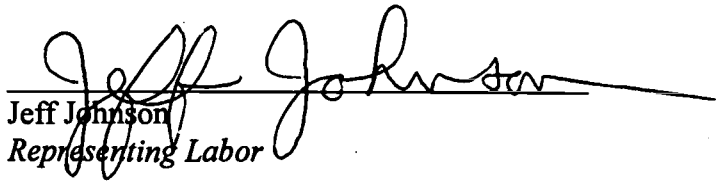
We know how much a family-wage job means to every adult worker. We know that children who don't succeed in school face a steep hill to climb to economic self-sufficiency and a sense of belonging to the larger community. Implementing this plan will require political commitment and both public and private investment. Our success continues to depend on an unprecedented degree of collaboration among public agencies and institutions, private providers of training and education, community organizations, employers, students, unions and workers. It also will require sustained public dialogue that engages citizens in the process of change.

The Board is committed to quality — to work that is well-documented, useful for our partners, and relevant to the public. Therefore, we are soliciting readers' views on the plan via the customer satisfaction survey that follows this letter.

We look forward to working with you to implement this ambitious agenda for positive change.

Sincerely,

Betty Jane Narver
Chairperson



Jeff Johnson
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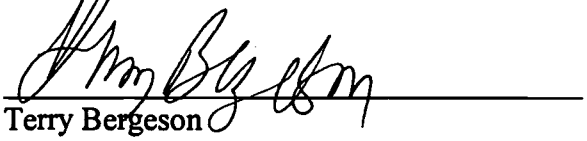

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Superintendent of Public Instruction

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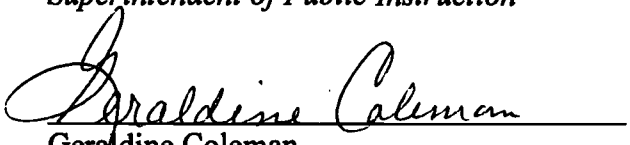
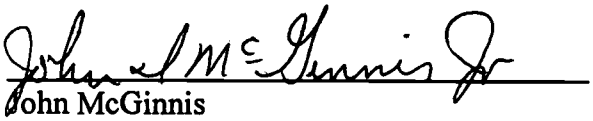


Geraldine Coleman
Representing Business



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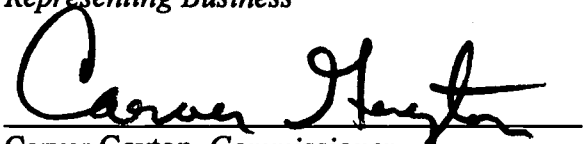
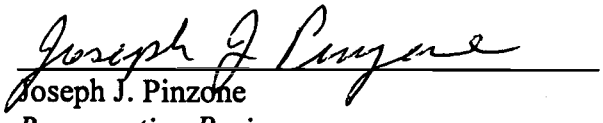
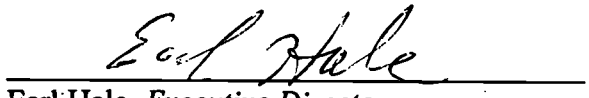


Carver Gayton, *Commissioner*
Employment Security Department



Joseph J. Pinzone
Representing Business



Earl Hale, *Executive Director*
State Board for Community and Technical Colleges

High Skills, High Wages 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. Alternatively, you may access a form on our website and complete it electronically.

1. How **useful** are the ideas presented in this report?	Not Useful	Somewhat Useful	Very Useful
2. How **clear** are the ideas presented in this report?	Not Clear	Somewhat Clear	Very Clear
3. How **useful** are the recommendations?	Not Useful	Somewhat Useful	Very Useful
4. How **clear** are the recommendations?	Not Clear	Somewhat Clear	Very Clear
5. How complete is the information?	Not Complete	Somewhat Complete	Very Complete
6. How accurate is the information?	Not Accuarte	Somewhat Accurate	Very Accurate
7. How is the information presented?	Not Enough Detail	Right Amount of Detail	Too Much Detail
8. How is the length of the document?	Too Short	About Right	Too Long
9. Are there enough charts and graphs mixed in with the text?	Not Enough Charts	Good Balance	Too Many Charts

10. Would you like to see this report on the Internet? Yes ___ No ___

11. Do you want additional copies of this report? Yes ___ Quantity _____ No ___
(If yes, please provide us with your name and address below.)

12. How did you expect to use this report? How have you used this report?

13. How can this report be made more useful in future editions? What additional information would you like to see in subsequent reports?

Please Tell Us About Yourself

JOB TITLE	SECTOR	ZIP CODE
	Public ___ Private ___ Nonprofit ___	

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 #11, please fill out the following.)

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INTRODUCTION

How Will Washington Work?

In the coming century, the driving force for Washington's economy will be the human mind. If we succeed in the global marketplace of the future, it will be because we invest wisely now in the human capital necessary to produce products and services that are high quality, to innovate, and to adapt to changing needs and technologies.

Our challenge is to close the dangerous gap between today's educational levels and the more demanding skill requirements of the family-wage jobs of tomorrow. And, we must close the gap both for young people who will enter the workforce in years to come and for adults who are already working.

—Continued—

This challenge has a special urgency for those who have been pushed to the margins of the economic mainstream. New entrants to the workforce will increasingly be women, people of color, and non-English speakers—people whose talents have been underutilized in the past, but whose full participation will be essential to our future economic success.

Creating a highly skilled workforce requires sustained public and private investment. That investment will only be made when people understand the need for change and the devastating consequences of failure. And, it can only be sustained when all citizens can see that the taxes they pay for training and education are producing successful citizens and a world-class workforce.

The Governor and the Legislature have charged the Workforce Training and Education Coordinating Board with preparing a comprehensive plan to ensure that Washington develops the well-educated, multi-skilled, and flexible workforce we need to compete in the global economy. *High Skills, High Wages: Washington's Comprehensive Plan for Workforce Training and Education* fulfills that assignment.

"High Skills, High Wages," describes the economic and demographic conditions that underlie the need for change and lays out the actions that state-level policy leaders must take to help achieve our vision of high skills, high wages. Clearly, government alone cannot create the system we need, nor will action at the state level bring about all the necessary improvements. Businesses, labor unions, community organizations, workers, students, parents, and educators must all be partners in the effort.

High Skills, High Wages

The Impetus for Change

A Dynamic Economy That Demands High Skills

Washington's economy is robust. Unemployment is the lowest it's been for decades. Job opportunities abound, and employers are having a hard time finding qualified applicants. Making the most of this economy, however, depends on where you live and the skills you have. While Washington's urban centers enjoy rising wages and low employment, many of its rural areas have stagnating wages and high unemployment. Washington's economy, moreover, is very cyclical, and, at some point in the future, another downturn will occur.

For years, Washington's resource-based economy provided high paying jobs to workers with only a high school education. Our forests and factories provided a living wage to loggers and production workers. Now these traditional sources of high-wage work are either shrinking or have limited prospects for growth. Nowhere is the decline of resource-based jobs more keenly felt than in rural Washington. While Washington State's unemployment rate hovers around 4 percent, much of rural Washington suffers from high unemployment.

—Continued—

There are presently between 200,000 and 300,000 unfilled positions in the technology field. The reason for the difficulty in filling these positions is not because of low unemployment numbers, but because of the lack of skilled workers. Many of these jobs do not require four years and plus of post-secondary education. They do require an excellent vocational education system and the ability to pursue further technical education following high school.

Senator James Jeffords, on the passage of the Workforce Investment Act of 1988

To take advantage of growing sectors of the economy that provide family-wage jobs requires personal and public investment in education beyond high school. Real wages have been falling for those without postsecondary education. From 1980 to 1989, real wages for Washington workers without a high school education fell 27 percent. Wages for workers with a high school diploma, but no postsecondary education, dropped 12 percent.

Now, and for at least the next decade, the greatest number of family-wage job opportunities will be in occupations that require some postsecondary education but not a 4-year degree. Over the next decade, there will be approximately 380,000 job openings for technicians, paralegals, health care workers, salespeople, and other occupations that require 2 to 3 years of postsecondary education. By comparison, there will be 222,000 job openings for teachers, engineers, lawyers, and other occupations requiring a 4-year degree.

The Shortage of Skilled Workers

Does our education system produce enough qualified workers to fill the jobs that require postsecondary training? The answer is no.

In 1997, 73 percent of Washington employers had difficulty finding qualified job applicants in the last 12 months. Employers most frequently had difficulty finding workers with specific skills for jobs that were open. Employers also frequently had difficulty finding workers with general workplace skills, such as good work habits and attitudes and the ability to solve problems on the job.

The shortage is most severe in the supply of workers with vocational training. While there are about 38,000 net job openings per year for workers with 2 or 3 years of postsecondary training, the state's 2-year colleges, private career schools, and apprenticeship programs produce only 19,340 such graduates per year.

Employers report that the skill shortage is hurting the economy by lowering productivity, reducing product quality, and limiting output or sales.

Turning Productivity Around

For years, our country's economy was stifled by stagnant productivity. Only by producing more high-quality goods and services with lower production costs are we able to increase our standard of living. Productivity grew by an average of 2.9 percent per year from 1960 to 1973, underlying steady improvement in living standards. But, it slowed to 1.1 percent from 1973 to 1990 and remained at 1.1 percent from 1990 to 1997. Productivity has begun to increase again. During 1997, it grew by 1.4 percent.

What has helped to turn productivity around? Increased use of technology and high-performance work strategies

are two of the ingredients. But, to achieve the full benefit of either, we need a skilled and educated workforce. We need high-skilled workers who can participate in decisions, operate and manage computerized machines, understand statistical process control, and contribute effectively in cross-functional teams.

If employers cannot find trained workers in Washington, they will look to other states or nations, or they will design new jobs so that high skills are less important and high wages are unnecessary. If we can't equip our workforce with the skills to succeed in high-wage jobs, our society will become increasingly polarized into skilled "haves" and unskilled "have-nots."

The Workforce

Will We Have the Skills We Need?

Two major population trends challenge our state's ability to meet the demand for skilled workers. Growth in the workforce is slowing, and an increasing percentage of new entrants to the workforce will come from populations that traditionally have received less education. Growth in our working-age population was 23 percent during the 1990s. From 2000 to 2010, workforce growth will slow to 17 percent, and from 2010 to 2020, it will be only 8 percent. Between 1990 and 2020, nearly 26 percent of the net additions to the workforce will be people of color, and more than half will be women.

If the supply of skilled workers is limited, Washington's future economic growth will be constrained. Shortages of skilled workers, which we are now experiencing at the peak of the business cycle, will worsen, particularly in occupations that require technical training beyond the high school level.

To ensure an adequate supply of skilled workers, we will need to draw on those, who in the past, have been underrepresented among the completers of technical training programs. Retention rates for people of color will need to be improved. Women and girls, now disproportionately prepared in low-wage fields, will need to make gains in more technical, high-wage fields. The combination of slower growth in the number of new workers and accelerating growth in technical occupations will bring together the moral imperative for equal opportunity and the economic imperative for better educated workers.

Too many young people never complete high school, and too many still emerge from high school ready neither for further education nor work. Too often, students who do not immediately move on to higher education after high school spend years drifting from dead-end job to dead-end job before entering postsecondary training.

For the 21st century, our paramount duty must be to create a system of lifelong learning—a system that every person, regardless of age or place of residence—can plug into for basic skills, professional advancement, or personal enrichment.

Governor Gary Locke, remarks at 2020 Commission Announcement

In the decades ahead, we will not have any workers to waste. We will need to ensure that every child learns in school, that every student graduates from high school with strong basic skills, and that every graduate of high school has the career counseling and education that he or she needs to make a successful transition from high school to postsecondary education and to the world of work. We will need to engage the thousands of women and people of color, as well as those who are disabled or economically disadvantaged and who are now underemployed or unemployed because they lack the education or job skills necessary to succeed in the workplace.

Our Workforce Training and Education System

Can We Rise to the Challenge?

Our global, competition-driven economy and the changing composition of our workforce present Washington's workforce training and education system with immediate and important challenges. Facing these challenges is a system that encompasses 16 state and federal programs, hundreds of public and private education institutions and training providers, and thousands of students, workers, and employers.

To respond to the economic and demographic challenges facing us, the leaders of the state's workforce training system are:

- Creating new ways to improve transitions from secondary to postsecondary education and to employment.
- Strengthening the skill content of training programs to more closely match employer needs.
- Increasing coordination among programs in order to provide higher quality, more accessible service.
- Improving accountability by adopting competency-based measures, labor market outcomes, and customer satisfaction as the yardsticks of student achievement and of program success.

Education Reform and High Schools

Preparing our youth to succeed begins with the high standards of academic achievement called for in Washington's Performance-Based Education Act of 1992 and the Education Reform Act of 1993. These acts establish demonstrated competency as the central measure of student achievement.

In addition to raising the standards for performance, our public education system must ensure that students appreciate how their skills are used in the world around them. For most students, this is most visible in the workplace. Throughout Washington, secondary educators are increasing students' awareness of how academic knowledge is applied in work settings and preparing students with basic workplace competencies so that they may enter employment with confidence of success.

Students have a wide range of options after high school: full-time employment, the military, postsecondary training, and baccalaureate education, among others. Secondary schools offer students a wide variety of strategies to prepare them for these options. Tech Prep, student co-ops and internships, Running Start, College in the High School, and Advanced Placement courses are examples of options increasingly available to high school students so that they can prepare for both further education and for work.

Community and Technical Colleges and Industry-Designed Skill Standards

The community and technical colleges are also moving to competency-based education. Skill standards are the key.

Skill standards specify what students and employees must know and be able to do within a particular industry and occupation. The State Board for Community and Technical Colleges (SBCTC) is organizing partnerships among employers, employees, colleges, K-12 schools, and 4-year institutions to develop skill standards that meet industry specifications. Steps include identifying employer skill requirements, developing assessment tools, and creating curricula. Currently, 18 different skill standards projects are in various stages of development.

When completed, community and technical colleges will be able to use skill standards to certify their vocational training. But, more than that, skill standards will be the glue that holds the training system together, enabling vertical and horizontal articulation among programs. Programs will be able to recognize the skills of incoming participants, no matter where those skills were learned—on a job, in high school, at a 2-year college, or through some other public or private program. Instructors will not have to repeat what their students already know. And, when individuals are certified as meeting industry standards, employers will have a convenient and accurate tool by which to judge the skills of job applicants.

The New Workforce Investment Act

Besides the 16 programs whose primary mission is vocational training or basic skills instruction, there are 25 other programs that provide employment-related services. These other programs provide such services

Few issues that we vote on in Congress are as important to the future of this country as the lifelong education and training of our workforce. We live in an era of a global economy, emerging industries and company downsizing. It is imperative that our delivery of services meets the employment and educational needs of the 21st century.

Senator Christopher Dodd
on the Workforce Investment
Act of 1998

as job search assistance, information about the labor market, and needs assessments. What the programs have in common is helping individuals enhance their employment opportunities.

The complexity of these programs, however, can be a burden to the customer trying to navigate the workforce development system. The complexity can also lead to inefficiencies and inhibit effectiveness.

In August of 1998, the President signed into law the Workforce Investment Act. The Act provides states and localities with opportunities to improve coordination and accountability for many federal programs. The state may submit a "unified plan" to the federal government covering over a dozen federal programs. The state has until July 1, 2000, to fully implement the Act.

The Act simplifies access to employment and training opportunities by mandating a One-Stop approach to service. This new approach connects the employment and training services of many different providers and makes them available in one stop, in person, or electronically. State organizations with the largest number of customers in workforce development programs have been working with representatives of business and labor under the leadership of the Employment Security Department to make One-Stop a success.

Coordination and Accountability

The Governor and Legislature established the Workforce Training and Education Coordinating Board (WTECB) to create a focused approach to planning, coordinating, and evaluating Washington's workforce training system.

Developing and maintaining a comprehensive plan for workforce training is one of WTECB's primary statutory assignments. Another key task is system accountability.

WTECB, in cooperation with the agencies that administer the state's major training programs and private career schools, coordinates a cross-program accountability system, "Performance Management for Continuous Improvement" (PMCI). PMCI lays out seven desired outcomes for workforce training and a series of indicators for measuring progress in achieving the outcomes. The seven outcomes are not static targets, but conditions that should be increasingly true for all people:

1. **Competencies**: Washington's workforce possesses the skills and abilities required in the workplace.

2. **Employment**: Washington's workforce finds employment opportunities.

3. **Earnings**: Washington's workforce achieves a family-wage standard of living from earned income.

4. **Productivity**: Washington's workforce is productive.

5. **Reduced Poverty**: Washington's workforce lives above poverty.

6. **Customer Satisfaction**: Workforce development participants and their employers are satisfied with workforce development services and results.

7. **Return on Investment**: Workforce development programs provide return that exceed program costs.

These initiatives in K–12 education, community and technical colleges, the Employment Security Department, and by the Workforce Training and Education Coordinating Board are making the workforce training system more responsive to the needs of students, families, workers, and employers. But, more must be done. Our recommendations are designed to take the next steps to bridge the gaps between our current training system and the one we need for tomorrow.

Recommendations

To reach our vision of high skills, high wages, we must plan our journey carefully. To get there, we will have to pull together. We cannot afford the high cost of duplication, fragmentation, and working at cross purposes. To arrive at our vision, we must have a clear map—a set of goals and objectives—that set our direction and guide programs of workforce training system. The following defines our long-term goals, our objectives for the next two years, and the specific actions that should be taken.

The four goals the system should work to accomplish over the next five to ten years are:

Goal 1: K–12 education will prepare students for both further education and work. Students will graduate from high school knowing and being able to do what is needed to succeed at both higher education and the world of work.

Goal 2: The gap between economic demand and the supply of postsecondary technical training will be closed. The state's adult training programs will produce the number of workers with the skills Washington employers need.

Goal 3: The training system will be a coherent and integrated system of customer services. We will build a network of training and related services that provides customers with easy access and portability among and between programs and avoids unnecessary duplication.

Goal 4: Training programs will be accountable for results. Every workforce training and education program will have measured results and quality improvement efforts to improve those results.

In order to make progress on these four goals, the state should achieve the following objectives and specific actions over the next two years:

- **Goal 1: K-12 education will prepare students for both further education and work.**

  Objective 1: Improve career-related learning during high school.

  Recommendation 1

  A. The Office of Superintendent of Public Instruction (OSPI) should support high school pilot programs with a combined focus on academic and work skills. OSPI should also support community partnerships of business, labor, and education for work-based learning and articulation of secondary and postsecondary vocational-technical education.

  B. The State Board of Education should include workplace skills (such as good work habits, teamwork, and accepting supervision) in its new performance-based graduation requirements.

  Objective 2: Improve career guidance in Washington schools.

  Recommendation 2

  OSPI should, in cooperation with state and local partners, develop and implement a plan to improve career guidance for Washington's young people.

  Objective 3: Establish an accountability system for K–12 education that measures students' preparation for both higher education and work.

  Recommendation 3

  The Governor and Legislature should enact an accountability system that:

  A. Reports student post-high school experience in higher education and employment in the School Performance Report and later adds measures of post-high school experience to the accountability system.

  B. Includes a measure of the student dropout rate.

- **Goal 2: The gap between economic demand and the supply of postsecondary technical training will be closed.**

  Objective 4: Increase the number of students who enroll in and complete postsecondary vocational-technical programs.

  Recommendation 4

  A. The Governor and Legislature should establish an annual fund of up to $9 million for scholarships covering up to two years tuition and fees for students in a high-demand postsecondary vocational-technical program.

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B. The Governor and Legislature should establish an annual fund of up to $.5 million to assist low-income individuals with costs associated with entering high-demand apprenticeship programs.

Objective 5: Increase high-wage technical programs at community and technical colleges.

Recommendation 5

The Governor and Legislature should fund a $6 million annual grant program through SBCTC to establish new programs in high-demand, high-wage technical fields.

Objective 6: Increase state investment in job-linked customized training.

Recommendation 6

The Governor and Legislature should appropriate $10 million annually in job-linked customized training by expanding the Job Skills Program.

Objective 7: Enhance the skills and earnings of low-income workers by increasing instruction in occupational skills.

Recommendation 7

A. The Office of Adult Literacy and SBCTC should continue to strengthen the integration of adult basic skills instruction with occupational skills training, work experience, and computer training.

B. Services for low-income individuals currently provided through the Job Training Partnership Act Title II should offer participants, whenever appropriate, the opportunity to enter and complete vocational-technical programs at community and technical colleges, private career schools, or apprenticeships.

C. WorkFirst should use funds from savings in case load reductions to support wage progression among public assistance recipients and other low-income adults by combining occupational skills training with work.

Objective 8: Increase employer investments in employee training.

Recommendation 8

The Governor and Legislature should enact tax incentives for employer investments in training their employees.

Objective 9: Help small businesses gain better access to the workforce training system.

Recommendation 9

The Governor and Legislature should, using existing entities, establish a public-private partnership of local brokers to connect small businesses to workforce training programs and resources.

Objective 10: Use the K–20 Technology Network to provide workforce training in rural areas.

Recommendation 10

The Community and Technical College system should design and implement ways of using the K–20 Technology Network to provide rural areas with training linked to economic development efforts.

- **Goal 3: The training system will be a coherent and integrated system of customer services.**

Objective 11: Integrate the Workforce Investment Act into the state's workforce development system.

Recommendation 11

WTECB will develop and make recommendations to the Governor and Legislature regarding mechanisms for integrating the federal Workforce Investment Act of 1998 into Washington's workforce development system.

Objective 12: Implement a One-Stop Career Development System for providing employment-related services.

Recommendation 12

A. The Governor and Legislature should enact legislation authorizing the Employment Security Department to enter into data-sharing agreements with partners of the One-Stop Career Development System.

B. The Executive Policy Council of One-Stop should ensure that the One-Stop information system enables program operators to share information on participant services; and that participant information is cumulative, and common intake and assessments and other common tools are used to the maximum reasonable extent.

Objective 13: Expand the use of portable skill standards in workforce development programs.

Recommendation 13

A. SBCTC should increase the number of industry-designed skill standards, develop a process for updating existing standards, and develop skills standards-based curricula and assessments.

B. OSPI should support the development of skill standards-based curricula and assessments to incorporate skill standards in secondary schools.

C. WTECB will convene a working committee to review recent efforts to identify, assess, and credential general workplace skills and make recommendations for next steps leading to a portable credential of workplace competency.

Objective 14: Develop a new State Plan for Adult Literacy that will improve efficiency and effectiveness of adult basic skills education.

Recommendation 14

The Office of Adult Literacy and SBCTC should develop a new Washington State Plan for Adult Literacy, whether as a stand-alone plan or as part of a unified plan for workforce development as permitted under the newly enacted Workforce Investment Act.

Objective 15: Provide for regional coordination of workforce training and education.

Recommendation 15

WTECB will consider the lessons learned from the voluntary regional alliance pilot as one source of information as it prepares its recommendations to the Governor and the Legislature on implementation of the federal Workforce Investment Act's provisions on local workforce investment boards.

- **Goal 4: Training programs will be accountable for results.**

Objective 16: Extend the measurement of results to more workforce training and education programs.

Recommendation 16

A. OSPI should provide for more comprehensive collection and maintenance of data required to evaluate the results of secondary vocational-technical education.

B. The Office of Adult Literacy should provide for the collection and maintenance of data required to evaluate results from noncollege providers of adult basic skills education.

C. WTECB will require licensed private career schools to collect and maintain data necessary to evaluate their results.

D. As the subcabinet leading WorkFirst, the state's welfare-to-work initiative, continues to refine the program, it should review the definitions for the performance measures for employment and earnings for consistency with the measures used for the training system so that practitioners are supported as they coordinate services to low-income clients.

Objective 17: Implement a consumer report system of training provider results that is readily accessible to participants, potential participants, and employers.

Recommendation 17

The Employment Security Department should, in cooperation with WTECB and the programs to be included in the reports, implement a consumer report system.

Objective 18: The state's workforce training and education programs should increase their use of quality management principles to improve continuously.

Recommendation 18

Workforce training organizations should, consistent with the principles of the Governor's Executive Order on Quality Improvement, complete quality self-assessments and use the findings to improve performance.

TOMORROW'S ECONOMY

Only The Skilled Will Be Well Paid

Washington's economy is robust. Unemployment is the lowest it's been for decades. Job opportunities abound, and employers are having a hard time finding qualified applicants. But, making the most of this economy depends, in part, on where you live and the skills you have. While Washington's urban centers enjoy rising wages and low employment, many of its rural areas have stagnating wages and high unemployment. And, even our low urban unemployment rates can be deceptive. Securing a job might be easy in our large cities, but securing a high paying one that is sustainable over time may not be. Washington's economy, moreover, is very cyclical, and at some point in the future, another downturn will occur.

Our new economy is knowledge-based, and many of the fastest growing, best paying jobs are technical. The majority of family-wage jobs created in Washington will require postsecondary education; they won't, however, require a 4-year degree.

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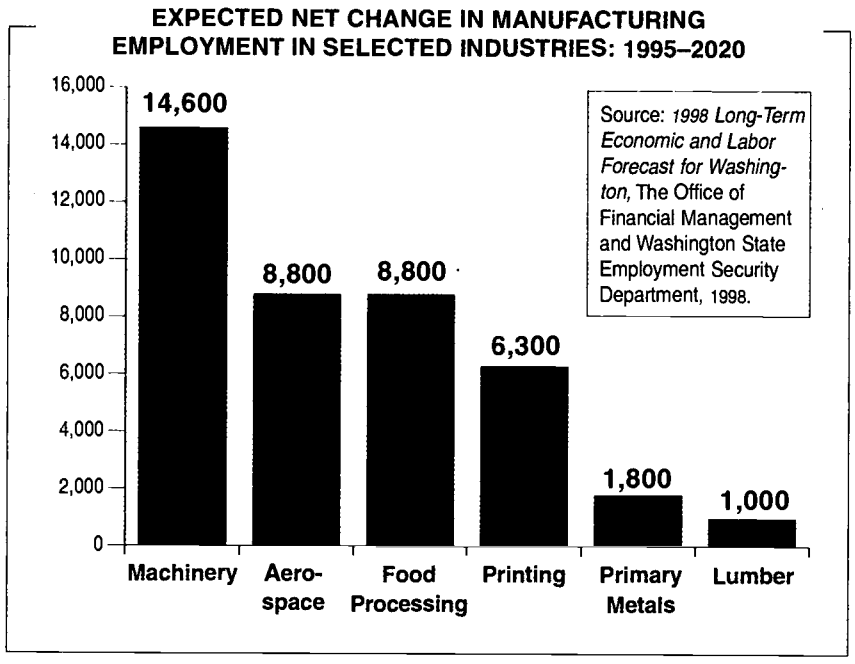
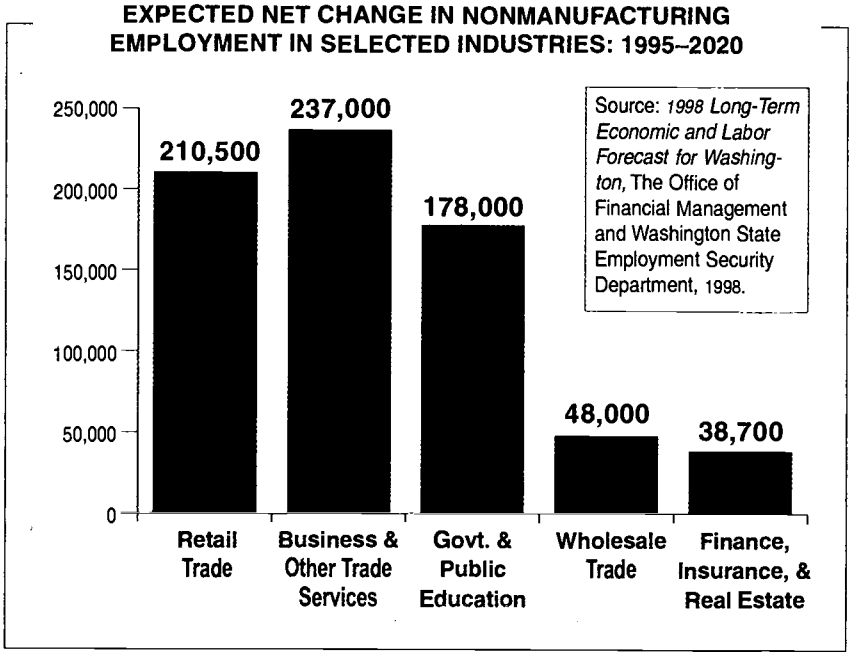


Manufacturing employment in Washington will grow, but slowly.



Employment growth in Washington's trade and service industries will far exceed growth in manufacturing employment.

The growing need for well-educated workers has been fueled, in part, by profound changes in the workplace. During the 1990s, employers invested heavily in technology, especially information technology and high-performance work practices such as teaming and continuous improvement. These changes flourish only where there are high-skilled workers. If Washington wants its citizens to enjoy high paying jobs, it must prepare people to use current **and emerging** technologies and function effectively in high-performance workplaces.

Employers, however, report a severe shortage of job applicants with the skills required for the contemporary workplace. The state's workforce training and education system faces the challenge of preparing enough workers with the kinds of skills employers are looking for. The training system must also assist in the continual retraining and upgrading of incumbent workers so that their skills stay up-to-date.

Good Opportunities in Washington's Traditional Industries are Shrinking

For years, Washington's resource-based economy was able to provide high paying jobs to workers with only a high school education. Our forests and factories provided a living wage to loggers and production workers. Now these traditional sources of high-wage work are either shrinking or have limited prospects for growth.

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The lumber and wood products industry, which once employed 61,000 people in the state, has shrunk to about 35,000 and will continue to decline due to supply limitations and technology changes in the mills.[1]

Although the airlines have recovered from a prolonged period of low profitability and are ordering new jets, The Boeing Company is committed to building those jets with fewer people in the future.[2] Aerospace employment stood at 111,000 in December 1997, up from the recent low of 79,800 in 1995. But, in the future, employment will gradually decline as Boeing implements cost control measures to compete with Airbus Industries and other potential foreign producers. By 2020, Washington's aerospace employment is expected to be 89,000.[3]

No Boom in Rural Washington

Nowhere is the decline of resource-based jobs more keenly felt than in rural Washington. While the state's unemployment rate hovers around 4 percent, much of rural Washington suffers from high unemployment. Unemployment rates for 8 of our rural counties are more than double the state's average, ranging from 8 percent in Grant County to 10.4 percent in Pend Oreille.[4] The Corporation for Enterprise Development recently rated Washington as having one of the highest urban/rural income disparities in the nation.

Why? For decades, rural Washington was dependent on natural resource industries such as logging, fishing, and mining. These industries are not the job creators they once were. Agriculture is a major source of rural employment, but many jobs are seasonal, and the agricultural economy is vulnerable to economic downturns in food importing countries.

Fostering Technology in Rural Communities

Grays Harbor and Pacific Counties have suffered high unemployment for over 20 years, spurring efforts to seek economic opportunities to replace lost timber jobs. Three years ago, the two counties joined with sixteen school districts, the Port of Grays Harbor, Grays Harbor Community College, and others to form the Community Education and Life-Long Learning (CELL) Center, a learning center connected to the information highway with state-of-the-art equipment.

The CELL Center initiative resulted in a 10,000 square foot facility at the Port, classes on computer applications and information management at the college and high schools, and an OSPI-funded OC3 high bandwidth connection to the Internet.

Recently, the CELL Center linked with the Safe Harbor Technology Corporation, a relatively new enterprise providing telephone and e-mail based technical support services. Because of new Internet technology, such services may be provided to customers at or from remote locations. Safe Harbor provides a model for new enterprise in stressed areas such as Grays Harbor.

By linking with the CELL Center, Safe Harbor is gaining access to the high bandwidth Internet connection and to the Center's education infrastructure. By locating in Grays Harbor County, Safe Harbor gets access to highly skilled but dislocated workers who are accustomed to the around-the-clock shift work Safe Harbor will require. By December 1999, Safe Harbor expects to have 100 employees whose income and benefit packages will average $35,000 per year and will include the stock options typical of technology start-up companies.

In the global economy, it is education, not location that determines the standard of living.

Albert Hoser, CEO, Siemens Corporation

Unlike Washington's urban areas, our rural communities don't have diverse enough economies either to absorb hundreds, or even thousands, of dislocated workers at the wage levels of their former jobs.

In a Global Economy, Jobs Can Be Located Almost Anywhere

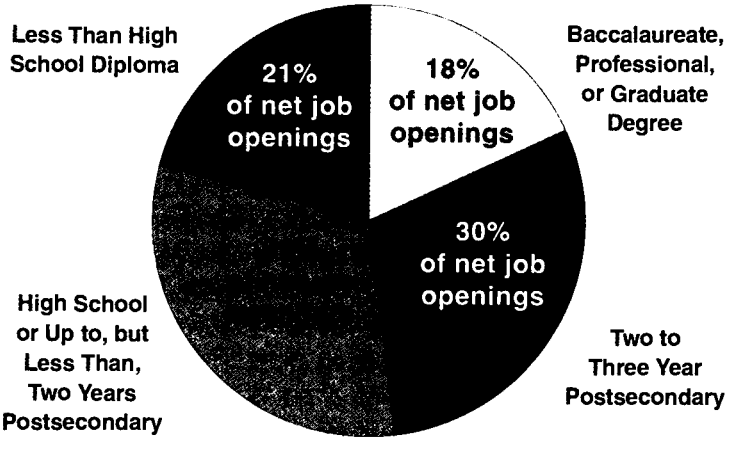
Washington's businesses—urban and rural—already know the advantages offered by a global economy. We sell our apples to Russia, our forest products to Japan, and our airplanes and software to the world. But, as opportunities to sell to other countries have increased, so have other countries' opportunities to make the very things we sell. And, it's not simply a case of using low-wage unskilled labor to mass produce inexpensive standard products. Foreign countries are increasingly able to offer highly skilled alternatives to using American workers.

Russian lab technicians design and test products for Boeing in Moscow. In the spring of 1998, IBM opened a $25 million global research unit in India. French and German production workers are now making computer chips for Motorola and Texas Instruments.[5]

With advances in telecommunications, even complex service work can now be performed overseas. In the south India city of Bangalore, engineers provide on-line technical support for American programmers using Windows based products. Microsoft is only one of several companies that is contracting for software services in India. Hewlett-Packard, 3M, Intel, and AT&T also use Indian workers for software services.[6]

The same technology that allows India, France, and Russia to work for United States companies can be used to create business opportunities in Washington. This is especially true for rural Washington with its remote access to population hubs. We must prepare for opportunities—as distance matters less and less, a technologically educated and highly skilled workforce matters more and more.

EDUCATIONAL LEVEL REQUIRED FOR NET JOB OPENINGS BETWEEN 1996–2006



Source: Washington State Employment Security Department, 1998.

More job openings require two or three years of postsecondary training than require a 4-year degree.

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Where the Jobs Will Be in 2006

The future is not bright for those with only a high school education. Although Washington's economy is expected to have more than 250,000 job openings for low-skilled workers between 1996 and 2006,[7] these won't be the kinds of jobs that helped loggers and production workers prosper. They will be low-wage jobs serving food, cleaning offices, and unloading trucks.

The greatest number of new family-wage job opportunities will be in occupations that require some postsecondary education but *not a 4-year degree*. Over the next decade, there will be approximately 380,000 job openings for technicians, paralegals, health care workers, salespeople, and other occupations that require 2 to 3 years of postsecondary education. By comparison, there will be 222,000 job openings for teachers, engineers, lawyers, and other professionals who need a 4-year degree.[8]

The following table shows occupational areas that require at least 2 years of postsecondary education or training and that are each expected to generate at least 9,000 job openings in Washington in the next 10 years.

Source: *Occupational Outlook*, Washington State Employment Security Department, 1998.

Occupations Expected to Have 9,000 or More Net Job Openings in Washington: 1996-2006

Occupational Areas Requiring at Least Two Years but Fewer Than Four Years of Postsecondary Education

Managers and Administrators 21,320
(theater managers, project directors)

First-line Supervisors, Sales 17,370
(wholesalers, retailers, sales supervisors)

Registered Nurses 13,160

Carpenters 12,590

First-line Supervisors, Clerical 12,070
(customer service managers, word processing supervisors)

Maintenance Repairers, General Utility 11,990
(fire fighting equipment specialists, industrial/building maintenance repairers)

Professional and Technical Occupations 10,200
(research assistants, technicians)

Sales Representatives, Excluding Retail 9,620
(sales representatives in oil and textiles, manufacturers' representatives)

Automotive Mechanics 9,040
(car, bus, and truck mechanics; diesel engine specialists)

Occupational Areas Requiring a Baccalaureate or Graduate Degree

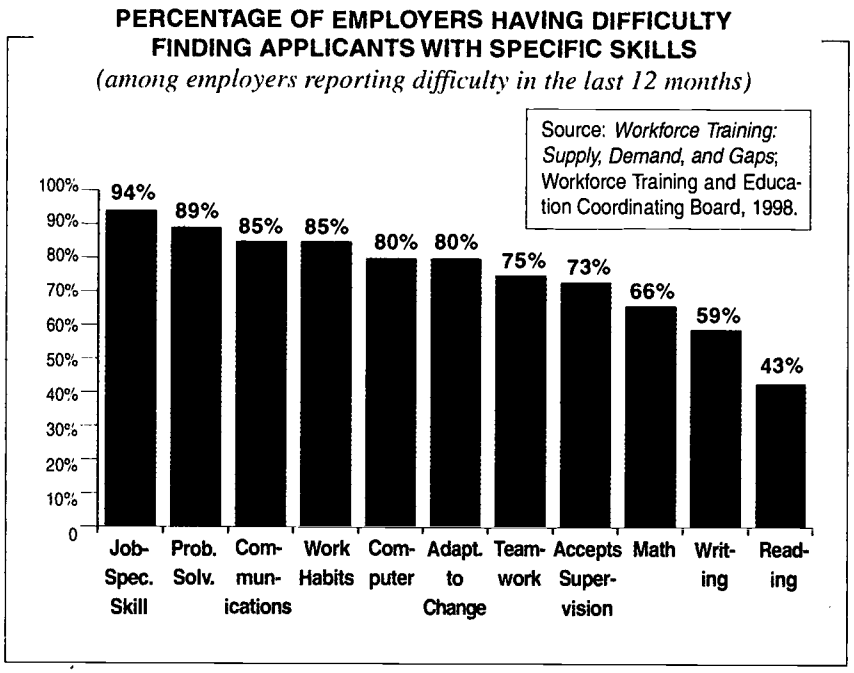
Managers and Top Executives 25,210
(school presidents and superintendents, directors in civil services, business managers)

Secondary School Teachers 15,930

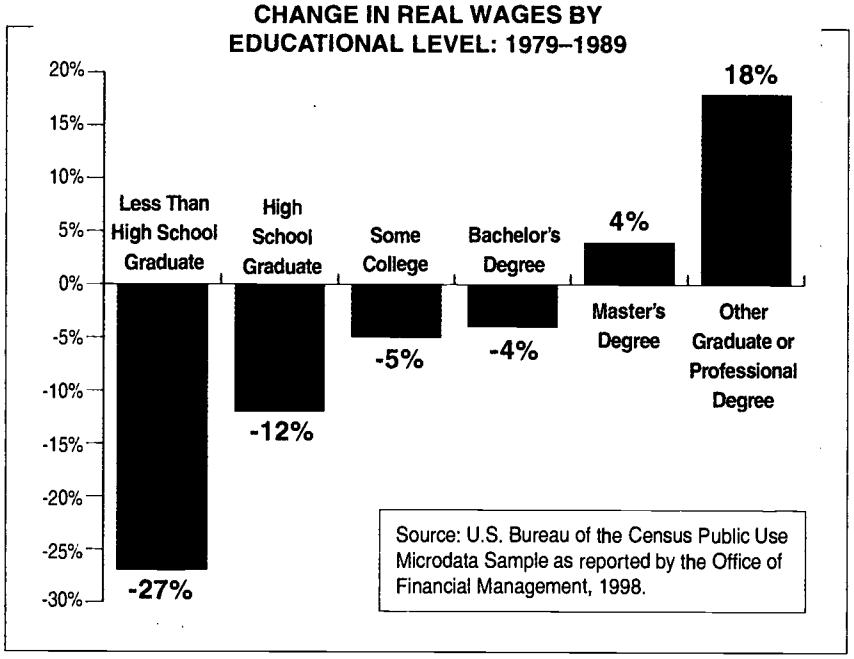
Elementary Teachers 14,170

Computer Engineers 12,250
(software engineers, hardware analysts)

System Analysts 12,230
(program analysts, system programmers, information scientists)



Employers have difficulty finding applicants with the skills employers need.



Real wages for the less skilled have fallen the most.

Employers Report a Severe Shortage of Skilled Workers

Does our educational system produce enough qualified workers to fill these jobs? The answer is no, and the shortage is most severe in the supply of workers with vocational training.

A survey of 1,000 employers by the Workforce Training and Education Coordinating Board found that 73 percent of employers had difficulty finding qualified job applicants in the last 12 months. Among employers who had difficulty, 94 percent had difficulty finding workers with job-specific skills. This was more than the percent who had difficulty finding any other type of skills, including the basic skills of reading, writing, and math.[9]

Similarly, employers are having a hard time finding workers with a vocational credential. Seventy-six percent of employers who had difficulty, had difficulty finding job applicants with a postsecondary vocational diploma or certificate. This is more than had difficulty finding job applicants at any other education level.[10]

For the next 5 years there will be about 38,000 net job openings per year for workers with 2 or 3 years of post-secondary training. Yet, the state's 2-year colleges, private career schools, and apprenticeship programs produce only 19,340 such graduates per year. Even adding people who move to Washington from other states, there is still a shortage of about 15,000 workers per year who have completed postsecondary training.[11]

Worse, employers believe skill shortages are hurting the economy by lowering productivity, reducing product quality, and limiting output or sales.[12]

An Increasing Gap Between the "Haves" and "Have-Nots"

Skill shortages also contribute to another problem: a widening gap between well-educated citizens with high incomes and lower-skilled citizens struggling to maintain even a modest standard of living. For many Washingtonians, like other Americans, living standards and quality of life have deteriorated. Statewide, real average wages declined by 8.8 percent between 1979 and 1989. There has been some improvement in Washington since 1988; average real wages have actually increased. But, in 1996, average annual real wages were still $271 below the 1979 level.[13]

The effect of this drop has been moderated somewhat by increases in family income due to the entry of more women into the workforce. And the economy as a whole grew as the maturing of the baby boom generation and the arrival of immigrants increased the number of available workers. But, the fruits of that growth have not been equally distributed.

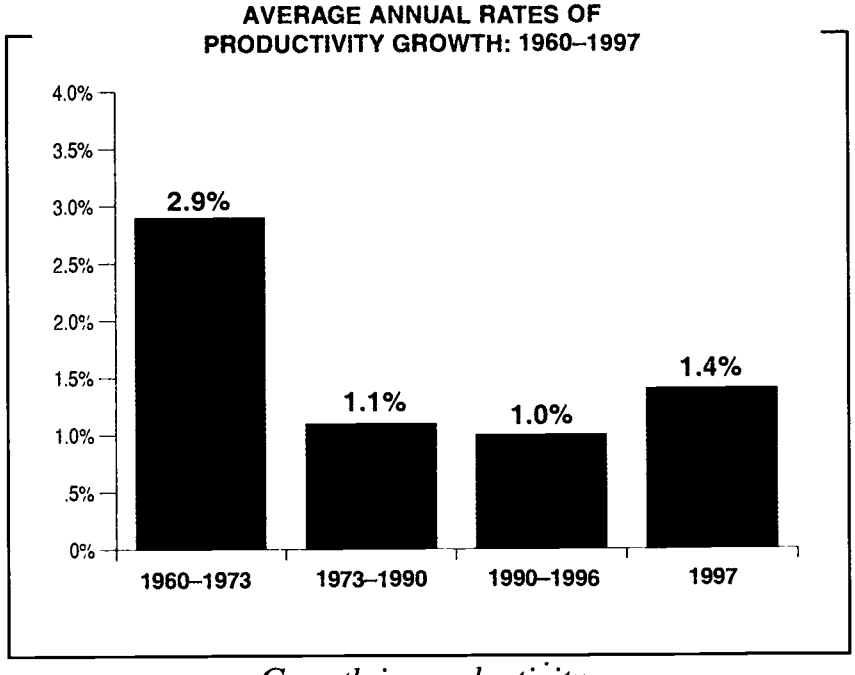
Earnings dropped sharply for workers without much education and training. From 1979 to 1989, real wages for Washington workers without a high school education fell 27 percent.[14] Real wages of workers with a high school degree, but no postsecondary education, dropped 12 percent. Having a 2- or 4-year college education moderated the decline, but real wages still fell by 4 and 5 percent, respectively. In contrast, those with a professional or doctoral degree found their real wages increasing 18 percent. National studies find that employees gain, on the average, an 8 percent increase in income for each additional year of schooling.[15]

This is a growing national crisis, and one that involves demographics, education, technology, and a growing skills imbalance—all exacerbated by a strong economy.

Phyllis Eisen, Executive Director, Center for Workforce Success

Turning Productivity Around

One cause of stagnating incomes was stagnating productivity growth. Only by producing more high-quality goods and services with lower production costs are we able to increase our standard of living. Productivity grew by an average



Growth in productivity is increasing.

The shortage of qualified software professionals is the number one issue on the minds of WSA member CEOs.

Ken Myer,
Regional Manager,
IBM Northwest

of 2.9 percent per year from 1960 to 1973, underlying steady improvement in living standards. But, it slowed to 1.1 percent from 1973 to 1990 and dropped to 1 percent from 1990 to 1996. Productivity has begun to increase again; during 1997, it grew by 1.4 percent.[16]

What has helped to turn productivity around? Increased use of technology and high-performance work strategies are two of the ingredients. But, to achieve the full benefit of either, we need a skilled and educated workforce. According to a study sponsored by the Census Bureau, a 10 percent increase in the educational attainment of a company's workforce results in an 8.6 percent increase in productivity.[17]

Technology Demands Higher Skills

Few occupations are escaping the technological changes driven by computers. Employees in nearly every field have learned new skills as they have incorporated computers into their jobs. Machine tool operators make parts using computer controlled machines. Fork lift operators in factories use computerized inventory locating devices. Cars, traffic lights, heating and cooling systems, hospitals, machine shops—have become computerized.

Employees must not only become familiar with new, highly sophisticated machines, they must learn and relearn whole new organizational processes associated with those machines. According to Kiichi Mochizuki, a former Japanese steel executive who heads Pacific Institute Research Group:

> *These days, with computerized factories and digitally controlled machines, mathematics are very important for factory operations. When you talk about skill—the word 'skill' is wrong: It implies manual dexterity to carve wood or hit something with a hammer. Now skill is mental rather than manual.*[18]

Even industries that perfected mass production using semiskilled workers have undergone transformation. Many U.S. companies have reduced the number of supervisors in their factories and given workers greater responsibility for ensuring quality, redesigning manufacturing processes, and improving the products themselves. Many of these companies used to hire workers without a high school diploma. This is no longer the case. As the use of sophisticated technologies continues to increase in our nation's businesses, so also do the educational levels of their entry-level workers.

Information Technology

Nowhere is the unmet demand for workers with technical knowledge and skills more acutely felt than in the exploding field of Information Technology.

Information Technology employees design, program, and maintain computers and computerized systems. And, since such systems are pervasive in our lives, so is the need for Information Technology workers. Information Technology jobs have grown so fast that the workforce training system can't keep up with the demand. A recent survey conducted

by the Washington Software Alliance found that there are currently thousands of unfilled information technology jobs in Washington. Many of these jobs require postsecondary education but not necessarily a 4-year degree.

High-Performance Work Organizations Need Workers Who Think

Today's businesses must be fast on their feet. To survive in today's constantly changing marketplace, they must pursue a strategy of market flexibility and responsiveness. They must rely on employees who can adjust production processes quickly to move in a new direction. These companies tend to share a set of traits that collectively describe a "high-performance work organization." These traits include:

- A commitment to continuous improvement.
- Effective worker participation in decision-making at the shop floor or frontline level.
- The integration of technology into work processes to a high degree.
- Cross-functional teams responsible for customer service, training, problem solving, and product design.
- Management by coaching, planning, and facilitation, rather than enforcing.
- A culture that promotes high levels of informal learning among employees.

Assessment Shows Need for Information Technology Workers

In early 1998, Washington's Software Alliance contracted with Northwest Policy Center to assess the "extent and nature of the workforce challenges" facing the software industry in Washington State. The assessment shows that Washington State has a serious shortage of information technology workers:

- Washington's software industry includes about 130 medium/large and 2,300 small firms.
- The industry employed 11,000 in 1988—10 years later it employed more than 46,000.
- There is currently a severe shortage of workers, which is slowing industry growth.
- In 1998, Washington State had 10,000 unfilled information technology jobs.
- Nearly 60,000 additional information technology workers will be needed within the next 3 years.
- Educational institutions in Washington State are training far fewer information technology workers than are likely to be needed.
- The demand for graduates of community college level information technology programs exceeds twice the locally educated supply.
- If the shortage continues, software companies will be forced to use a variety of tactics to fill the gap, including recruiting from other states, subcontracting work to firms in other states or countries, and bringing in foreign workers.

Pacifica Marine Adopts High-Performance Work Practices

Pacifica Marine is a Seattle-based manufacturing firm. Currently, its biggest contract is with Talgo, a Spanish high-speed train company. Pacifica has a contract to build 60 cars that Talgo will use in Amtrak's Pacific Corridor. This small start-up company has ambitions to become a model of union-driven economic development and innovative labor-management relations.

Opened in 1997, with venture capital from the International Association of Machinists and Aerospace Workers, Pacifica is committed to becoming a high-performance work organization.

It has already adopted many high-performance practices, including **employee participation** in decision-making; incorporation of **new manufacturing technologies**, including CNC mills and machines, as well as advanced welding machines for work with light weight metals and composites; and an emphasis on **cross-training** to increase production flexibility and responsiveness.

Employees of Pacifica are a diverse and talented group. More than half of the current workforce were dislocated workers, primarily from the defense and shipbuilding industries. In addition, 40 percent are women and people of color. All of the employees are highly skilled in at least one key area—electrical, mechanical, machining, computer operation, or welding.

Renton Technical College and Pacifica Marine recently collaborated to secure WTECB Job Skills Program funding to cross-train Pacifica's employees so that each is knowledgeable in two or more technical fields. In addition to technical skills training, employees will be trained in teamwork, ISO 9002, and effective leadership. The company believes this investment in training will allow it to grow even more productive, solidifying its base and expanding into new markets.

High-performance work organizations require high-skilled workers. Employees can't participate in decisions if they can't read the plant's production reports well enough to see the relationship between down time and financial performance. They can't operate computerized machines or understand statistical process control without some understanding of mathematics. And, they can't contribute to a cross-functional team without basic communication skills.

To meet the needs of a high-performance work organization, tomorrow's workers must not only receive job-specific and basic skills training, they must be able to:

- Adapt quickly to change.
- Perform more abstract work processes.
- Assume more decision-making authority.
- Work in teams.
- Understand systemwide needs.

Employers are having a hard time finding these high-performance skills among current job applicants. Among the 73 percent of employers who had difficulty finding qualified workers in the last 12 months, 80 percent had trouble finding workers with the ability to adapt to change.[19] Seventy-five percent had difficulty finding workers skilled in teamwork, and eighty-nine percent had trouble finding job applicants skilled in problem solving. Without these skills, businesses cannot become high-performance work organizations.

Yet, many Washington businesses are striving to adopt the high-performance strategy. In 1990, a national study reported that only 5 percent of employers were using methods that characterize a high-performance work organization.[20] When surveyed in 1997, 20 percent of Washington employers indicated they had a formal continuous quality improvement program in place.[21] Larger percentages of employers are using other high-performance practices such as self-managed work teams or benchmarking their results against other firms.

The high-performance strategy can only be an option when the employer is either willing to train its workforce or where there is already an adequate supply of skilled workers. Washington employers engaging in high-performance practices are more likely to provide training to their employees and to expect increased employment of workers with post-secondary training. As the number of high-performance work organizations increases, so will demand for highly skilled workers.

Implications

Washington's economy is changing. The jobs being created demand higher skills, and only higher-skilled jobs can pay a family wage.

Employers need skilled workers. If employers can't find trained workers, Washington's businesses will suffer. They won't be as innovative or competitive, and our state's now robust economy will be threatened.

Our citizens need jobs that pay well enough to provide a family-wage standard of living. Unless we equip our workforce with the skills to succeed in high-wage jobs, our society will become increasingly polarized into skilled "haves" and unskilled "have-nots."

Workforce training is a key influence on Washington's economic future. The state's training and education system must ensure that tomorrow's workers obtain the higher order skills necessary to perform in competitive organizations. Retraining must be available for today's workers so they can match changing skill demands. Major investments in the skills of current and future workers are essential. Workers must be life-long learners, and training must be readily accessible to both workers and employers.

Finally, workforce training and education policy and programs must be coordinated with state and local economic development strategies. A knowledgeable workforce is a state resource and a "draw" for employers considering where to locate or expand their operations. Coordinating workforce training with economic development can help us attract the industries that pay family-wage jobs and enhance the economic prospects of our citizens.

Section Three Notes

[1] "1998 Long-Term Economic & Labor Forecast for Washington State Office of Financial Management and Washington State Employment Security Department, 1998, p. 35.

[2] Ibid., p. 39.

[3] Ibid., p. 35.

[4] Employment Security Department, 1998.

[5] "Global Manufacturing Special Report," J. Robert Lineback, Semiconductor Business News, CMP Media Inc., October 1997, p. 1.

[6] Information from website of Software Technology Park, Bangladore, India, July 1998.

[7] Employment Security Department 1998.

[8] Employment Security Department 1998.

[9] "Workforce Training: Supply, Demand, and Gaps," Workforce Training and Education Coordinating Board, 1998, p. 6.

[10] Ibid., p. 8.

[11] Ibid., p. 27.

[12] Ibid., p. 10.

[13] "1998 Long-Term Economic and Labor Forecast for Washington," Washington State Office of Financial Management, p. 64.

[14] "State Economic Trends," Washington State Office of Financial Management, 1998.

[15] "Study Ties Educational Gains to More Productivity Growth," Peter Applebome, New York Times, May 14, 1995.

[16] Economic Report to the President, Transmitted to Congress, January 1998.

[17] "Study Ties Educational Gains to More Productivity Growth."

[18] "The Truth About the American Worker," Fortune, May 4, 1992, p. 54.

[19] "Workforce Training: Supply, Demand, and Gaps," Workforce Training and Education Coordinating Board, 1998, p. 7.

[20] America's Choice, the Report of the Commission on the Skills of the American Workforce, National Center on Education and the Economy, 1990, p. 40.

[21] Unpublished findings from the Workforce Training and Education Coordinating Board's survey of Washington State employers, 1997.

Will We Have The Skills We Need?

Washington's businesses will need increasing numbers of skilled workers, but two major population trends challenge our state's ability to meet that need. Workforce growth is slowing, and an increasing percentage of new entrants to the workforce will come from populations that traditionally have received less education. A third trend—the aging of the population—will increase the need for lifelong learning.

Slow Growth in the Workforce

Washington's working-age population grew by more than 25 percent each decade during the 1960s, 1970s, and 1980s.[22] This growth provided our employers with a ready supply of skilled workers to staff new or expanded operations. But, Washington's population growth is slowing. Even with continued immigration from other states and countries, growth in our working-age population slowed to 23 percent during the 1990s. In the decade from 2000 to 2010, the state's labor force growth is forecasted to slow to 16.8 percent. From 2010 to 2020, it is expected to drop to only 8.1 percent.[23]

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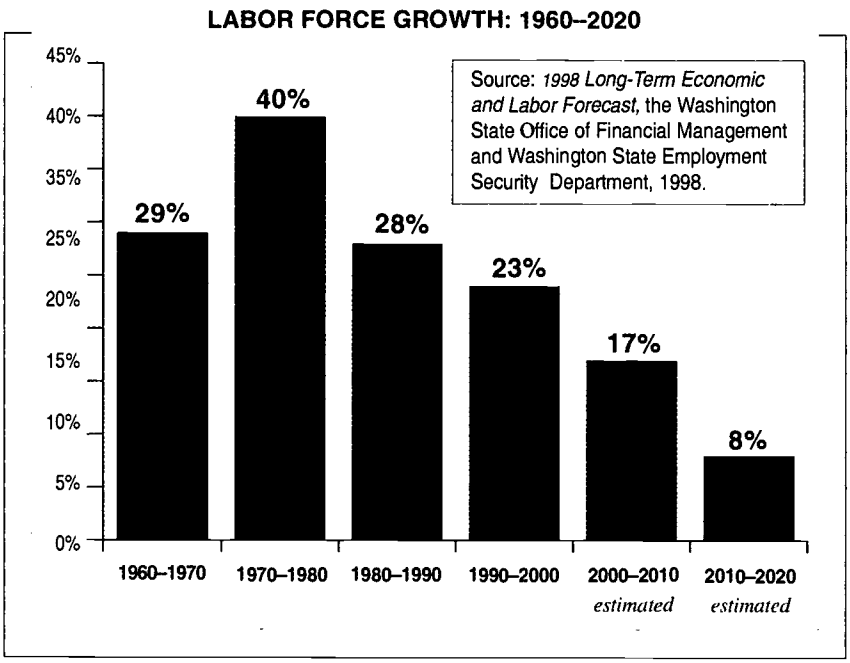
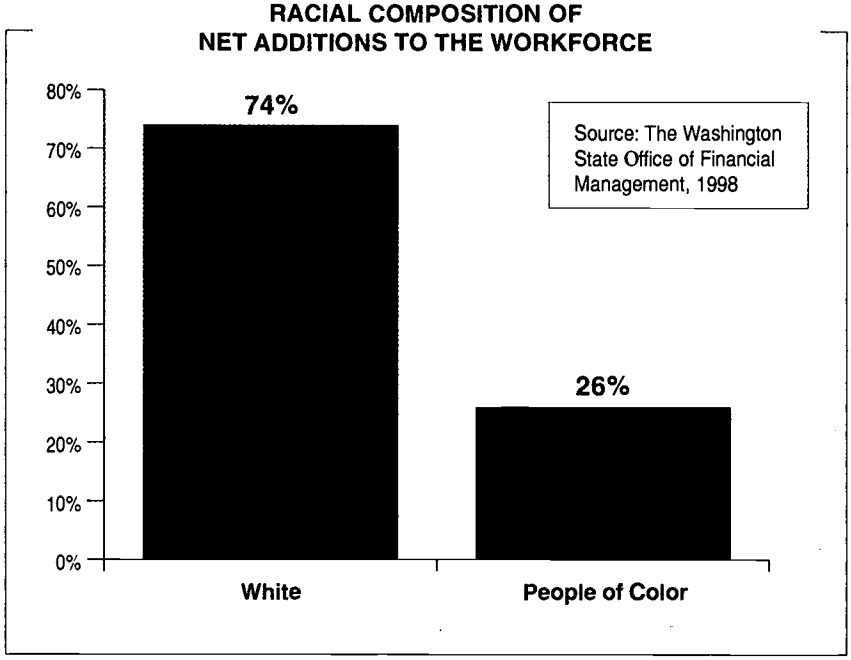


Growth in the labor force is slowing, creating the potential for shortages of labor and skills.



People of color will make up a large share of net additions to the workforce.

A lower birth rate is the main reason for this slower labor force growth.[24] Contributing also to the slowdown are a drop in men's labor force participation brought on by improved retirement options and a leveling off of the growth in women's labor force participation.

Washington's future economic growth could be increasingly constrained by limits in the supply of skilled workers, particularly in occupations that require technical training beyond the high school level.

This presents Washingtonians with an opportunity and a challenge. The opportunity is that good paying jobs will become available to a wider spectrum of people than in the past. The challenge is to ensure that our citizens have the skills necessary to succeed in these new jobs.

New Sources for Tomorrow's Workers

With a slowdown in labor force growth and an increase in the skill levels demanded by the jobs now being created, Washington's economy is going to need every available skilled worker in the state. Where will these workers come from? They could come from population segments that in the past have been underrepresented in both technical training programs and the workforce at large.

People of Color

Washington's population is gradually becoming more racially diverse. While the entire population is growing through

births and immigration, the number of people of color is growing more quickly than the white population.

Hispanic and Asian/Pacific Islanders populations in Washington are rapidly increasing. By 2020, Washington will be home to 699,200 Hispanics, an increase of 125 percent over 1990. The number of Asians/Pacific Islanders will rise by a slightly smaller percentage—113 percent.[25]

Nationally, the number of youth of color ages 5–17 will increase by 7.3 million between 1990 and 2010, while the number of white youth will stay about the same. In Washington, 23 percent of public school students in grades K–12 are students of color.[26] As many as 90 languages are spoken by students in Washington's large urban school districts.[27]

People of color are becoming a larger percentage of Washington's workforce. Twenty-six percent of the net additions to Washington's workforce (people entering minus people leaving) from 1990 to 2020 are expected to be minorities. In 1990, 9 percent of Washington's working population was nonwhite; by 2020, 15 percent will be.[28]

For a variety of reasons, including racial prejudice, people of color have in the past obtained less education on average than whites[29] and have experienced higher levels of unemployment.[30] As a result, this growing population has a large, unmet need for education and training. Washington must satisfy this need. The combination of slower growth in the workforce and faster growth among people of color bring together a moral imperative for equal opportunity and an economic imperative for better-educated workers.

Limitations of Poor Basic Skills

According to the State Adult Literacy Survey, between 31 and 36 percent of Washington's adults perform at the lowest 2 levels of proficiency (out of 5) in reading, math, and problem solving.[31]

At Level 1, many adults are unable to respond to much of the survey. Others can only perform simple, routine tasks involving brief and uncomplicated texts and documents. For example, some can total an entry on a deposit slip, locate the time and place of a meeting on a form, and identify a piece of specific information in a brief news article.

At Level 2, adults are able to locate information in text, make low-level inferences using printed materials, and integrate easily identifiable pieces of information. They demonstrate the ability to perform quantitative tasks that involve a single operation where the numbers are either stated or can easily be found in the text. But, they are bound to have difficulty absorbing and using information in tomorrow's (or today's) increasingly complex workplace.

At Level 3, adults are able to locate information in text, make low-level inferences using printed materials, and integrate easily identifiable pieces of information. They demonstrate the ability to perform quantitative tasks that involve a single operation where the numbers are either stated or can easily be found in the text. But, they are bound to have difficulty absorbing and using information in tomorrow's (or today's) increasingly complex workplace.

Spokane's Steps-to-Work Combines Job Training With Basic Skills Education

To get and keep a family-wage job in today's "knowledge" economy requires a very good grasp of English and basic math. But, what about people who don't have these basic skills? For them, the chances of landing a job with good pay and advancement opportunities are slim. And, that chance becomes even slimmer if the person is dependent on welfare and has little or no work experience.

In 1996, the Community Colleges of Spokane joined the Spokane offices of the Employment Security Department and the Department of Social and Health Services to develop ***Steps-to-Work***, a welfare-to-work program that helps develop basic skills together with employment skills.

Steps-to-Work is based on a "best practices" welfare-to-work model in which students enroll in basic skills classes while they are working in paid or voluntary work experience. Spokane's Steps-to-Work Program recruits people who have many barriers to overcome in order to become self-sufficient. Most are on welfare. Many have little or no English language skills, low-level reading and math skills, and little or no recent work history.

Steps-to-Work students attend class or work experience for 35 to 40 hours a week, typical work week hours. The program has four components: adult basic education, employment skills training, computer basics, and work experience.

Though the program is very young it is already showing good results. Over 25 percent of the program participants have passed one or more GED tests or completed their GEDs.

Steps-to-Work organizers plan to enroll more students in 1998–99 and to increase their collaboration with community agencies.

Citizens Who Are Economically Disadvantaged

Washington has thousands of citizens who lack basic skills such as high school level proficiency in math and reading, as well as the "new" basic skills of problem-solving, teamwork, and communication. Citizens who are economically disadvantaged, in particular, tend to lack basic skills.

Many of these citizens, such as agricultural workers, are employed but unable to advance because they lack transferable skills. Among the approximately 315,000 adults who are economically disadvantaged (defined as having incomes below 125 percent of the poverty line of $13,650 for a family of 3), 79,000 have no high school diploma or vocational training, and 146,000 are unemployed or not in the labor force.[32] Among the 76,000 adults receiving Temporary Aid to Needy Families (TANF) during an average month, about 23 percent do not have a high school diploma or GED.[33] Among the approximately 170,000 migrant and seasonal farm workers, the median annual income is $5,000, and the median level of educational attainment is 8th grade.[34]

Such citizens have substantial needs for basic workplace skills and occupational training that must be satisfied before they can take advantage of the opportunities the economy will present. Without sufficient foundation skills, these individuals won't be able to read the operating instructions that

accompany today's increasingly complicated machinery. They'll lack the understanding of math needed to adjust computer-guided controls. And, they'll be unable to compete for positions for which the ability to access and manipulate information is key.

Women

Women have entered the labor force in vast numbers over the last 25 years. In 1975, 47 percent of working-age women in Washington State were in the labor market. By 1990, that number reached 62 percent. It is expected to rise to 65 percent in 2010 and level off at 62 percent by the year 2020.[35]

Although more women are working and there are fewer barriers to entering male-dominated fields, women's progress has been uneven:

- Women are still concentrated in clerical, sales, service, and light manufacturing jobs.
- When women and men are in the same occupation, men still tend to have higher pay.
- Because of occupational selection, women continue to lack access to jobs with career ladders.
- Only 14 percent of the participants in state-approved apprenticeship programs are women, and many programs have no female participants.[36]

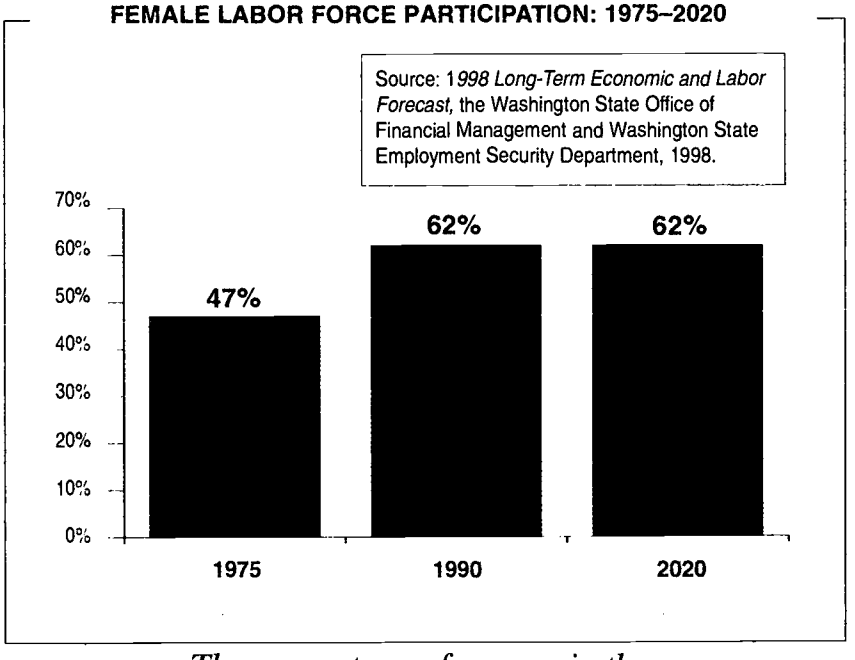
Eighty percent of all adults receiving TANF are women.[37] To the extent that women remain concentrated in occupations and industries that do not provide them with compensation sufficient to support themselves and their children or offer opportunities for advancement, these families will continue to remain within the boundaries of poverty.

Labor supply constraints for skilled occupations could sharpen the need to recruit and promote women. Employers who discourage sex stereotyping and provide "family-friendly" work environments will be more successful in recruiting and retaining the best candidates—male and female alike.

We must do more to meet the challenge of breaking the glass ceiling and opening wider the doors of opportunity for women.

Alexis M. Herman,
U.S. Secretary of Labor, 1998.

FEMALE LABOR FORCE PARTICIPATION: 1975–2020



The percentage of women in the labor force will level off, but will remain high.

40

Ten years ago in Walla Walla, there was one Hispanic person to every eight non-Hispanic person. Today, the ratio is one to five, and in 2005, that ratio will be one in four. We need help with transition to the new population and the new workforce.

J.R. Langrell, Vice President, Walla Walla Community College, testifying September 28, 1998, in Spokane at WTECB hearings on "High Skills, High Wages"

People with Disabilities

People with disabilities represent another underutilized human resource. Approximately 450,000 Washingtonians age 16 to 64 have work-limiting disabilities. According to a 1996 survey of 2,500 Washington citizens with disabilities, many feel that their skills are underutilized. Among the findings:

- Only 38 percent of people with disabilities have full- or part-time jobs.
- Of the those employed part-time, nearly half say they want full-time work.
- About one-third of those employed say that their jobs do not use their skills well.
- When asked what keeps them from getting jobs that better utilize their skills, survey respondents cite transportation, family responsibilities, need for help in finding a job, and limitations due to their disabilities.

When we fail to fully employ people with disabilities, we are losing out on a very important resource. We must work to eliminate barriers that keep people from working to their fullest potential.

Adapting to a Diverse Workforce

Washington's workforce training system must adapt to the growing diversity of the workforce. Public institutions' record in this area—from the perspectives of employees, as well as students—is mixed.

Training for Students of Color

Washington's large urban school districts have historically offered fewer vocational courses than suburban or rural school districts. Because most students of color live in large urban districts, these students lacked opportunities to explore vocational choices. In 1997, 284 African-American males completed a secondary vocational education program in Washington State.[38] This number is proportional to the K–12 population of African-American males and suggests that some progress is being made since 1995, when the number was 211.

With regard to enrolling minority students, postsecondary schools are performing well. Among the state's community and technical colleges, people of color are enrolled at rates higher than their incidence in the general population.[39] From 1993 to 1996, community college enrollment growth for students of color increased by 12 percent. In that same period, white student enrollment dropped by 8 percent.

Once people of color are enrolled, however, they complete courses of study at lower percentages than average.[40] (However, because of minority students' higher than average initial enrollment, they still complete their courses of study in higher percentages than the general population. And, Asian-Americans' retention rate is higher than that of other population groups.)

41

In general, African-American and Native American graduates of training programs are less likely than white graduates to be employed the third quarter after completing their program. And, Native Americans who do complete a community or technical college program or a Job Training Partnership Act (JTPA) program have substantially lower incomes than whites who complete the same program.[41]

Employing People of Color

Community and technical colleges have made progress in employing people of color. Minorities comprise slightly more than 11 percent of full-time faculty—less than their 17 percent representation in the general population. Nearly 16 percent of administrators and 19 percent of classified staff are people of color.[42] Thirteen percent of the top one hundred forty-two administrators are people of color, compared to eleven percent two years ago.

People of color are underrepresented in the ranks of those who lead and teach in our K–12 school system.[43] Only 8 percent of all administrative, faculty, and staff positions are held by people of color. Even though 23 percent of K–12 students are people of color, only 6.3 percent of teachers are.[44]

Women in the Workforce Training System

Enrollment of women and girls in workforce training and education, except in apprenticeship, is generally equal to or above their incidence in the population. Women, however, tend to enter fields of study for occupations that pay less than the fields dominated by men. As a result, after training, women graduates generally have lower earnings than men.[45]

As employees, women are well represented at all but the top levels of employment within the community and technical college system. They comprise 46 percent of full-time faculty and 55 percent of administrative positions. However, only 27 percent of the vice presidents and presidents are female.[46]

Within the K–12 system, 69 percent of the teachers and 43 percent of central and unit administrators are women.[47]

These figures paint a picture of women and people of color being able to enter the workforce training system as students and employees, but not achieve the same levels of success as their white male counterparts either as students or as employees and leaders.

The Population is Aging

The leading edge of the baby boom has entered its 50s. Before long, this largest generation in American history will swell the ranks of the retired. Already, people over age 65 constitute the fastest growing segment of the population.[48]

In contrast, the relatively small number of persons born during the period following the baby boom will enter their prime years of labor force participation. As a result, the ratio of active to retired workers may drop from 3.4 workers for

True equity of learning opportunity—and the academic excellence it fosters—will not be achieved unless educational institutions are willing to adapt what they do to the way students learn.

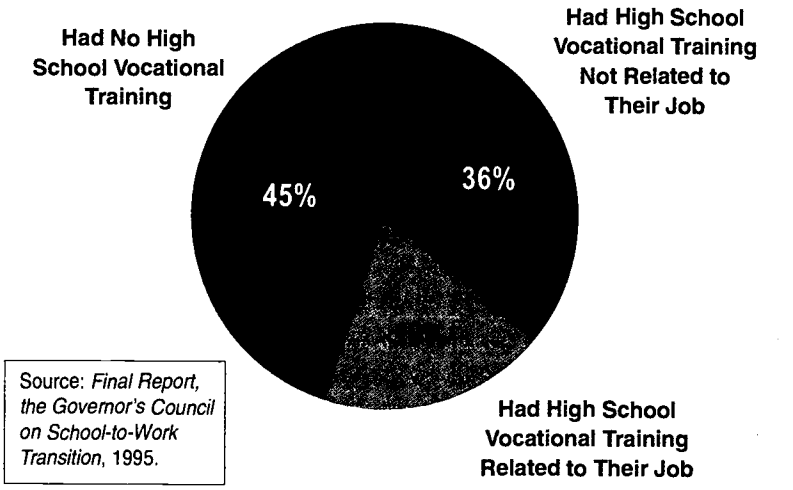
Dale Parnell, as quoted in *Connections*, May 1998

every one retiree in 1998, to 2.4 workers for every one retiree in 2020. By 2030, the ratio could drop to two workers for every retiree.[49]

The aging of our population has at least five implications for Washington's workforce needs:

- Because a diminishing pool of younger workers will be supporting the Social Security benefits of an ever increasing pool of retirees, it will become even more important that younger workers are employed at the highest level of their skills and earning capacity.
- With fewer younger workers entering the labor force, employers will increasingly need to rely on retraining older workers to meet emerging skill needs.
- Older workers who regard learning as a lifelong pursuit, instead of something that ends with the completion of their formal education, will be best able to profit from these new training opportunities. In addition, public and private training programs will need to serve the needs of older workers returning for retraining.
- New work arrangements may be needed to encourage retired workers to return or remain in the workforce as part-time employees.
- An increase in the number of employees supporting aging parents will demand more family-friendly policies in the workplace.

HIGH SCHOOL TRAINING OF GRADUATES WHO ARE EMPLOYED FOLLOWING GRADUATION



Source: *Final Report, the Governor's Council on School-to-Work Transition*, 1995.

Most employed high school graduates lack vocational training related to their jobs.

Youth

One possible source for new workers will be the next cohort, the baby boom "echo," the rapidly increasing population of young people. If the economy is to adjust successfully to an aging population, we must prepare the coming generation of young workers for full participation in the world of work. Projections show that over the next several years the state's population of 17- to 20-year-olds and 21- to 30-year-olds will increase rapidly, expanding at

a high rate for the next 10 years before leveling off.[50] But, will these young people leave school ready to succeed at high-skill, high-wage jobs?

Under the state's education reform act, Goal 4 is "For all students to develop the knowledge and skills essential to understand the importance of work and how performance, effort, and decisions directly affect future career and educational opportunities."

Too many young people never complete high school, and too many still emerge from high school ready neither for further education nor work. Twenty-three percent of Washington ninth graders drop out before their class graduation.[51] Only about one-sixth of graduating seniors have completed a sequence of vocational programs. Among high school graduates who were working full- or part-time after graduation, only 19 percent had received vocational training in high school related to their job.[52]

Too often, students who do not immediately move on to postsecondary education after high school spend years drifting from dead-end job to dead-end job before linking with training at a community or technical college or private career school. We lack an effective system to help students plan and prepare for their working futures. As a result, a large number of our young people are underutilized as workers and unable to take their places as full adults.

Implications: We Can't Waste a Single Individual

Now, more than ever, we must equip our citizens with a firm foundation of basic skills and technical training. Without a skilled labor force, Washington will increasingly be a society of rich people and poor people with a diminished middle class. Employers won't be able to find qualified workers to staff tomorrow's high-performance work organizations. Citizens will find themselves unable to compete for jobs in the most profitable and competitive companies. Finally, we may discover that the most desirable firms—those that offer family-wage jobs—move or expand to other places with greater availability of skilled workers and more responsive systems to produce them.

Can we afford to have any of our workers be unemployed or underemployed for lack of skills? Not if we want to preserve the quality of life we treasure. We must ensure that all of our citizens—people of color and whites, women and men, people with disabilities, the economically disadvantaged, and the prosperous—are trained and positioned for success. We can't afford to waste a single individual.

Job training and education programs should be available to the entire workforce and business community as part of a continuum of lifelong learning. At every stage in their lives, people should have the opportunity to equip and reequip themselves for productive work through school and work-based learning.

National Governors' Association

Section Four Notes

[22]"1996 Long-Term Economic and Labor Force Forecast for Washington," Washington State Office of Financial Management and Washington State Employment Security Department, 1996, p. 15.

[23]"1998 Long-Term Economic and Labor Force Forecast for Washington," Washington State Office of Financial Management and Washington State Employment Security Department, 1998, p. 25.

[24] Ibid., p. 3.

[25] "Population Forecasts by Race/Ethnicity, Age, and Sex," Washington State Office of Financial Management, October, 1996.

[26] "School Enrollment Summary," School Year 1997–98, Office of Superintendent of Public Instruction, p.1.

[27] Office of Superintendent of Public Instruction, 1998.

[28] "1998 Long-Term Economic and Labor Force Forecast for Washington," Washington State Office of Financial Management, p. 30.

[29] Ibid., p. 30.

[30]"Employment Situation Summary," Bureau of Labor Statistics, 1998.

[31] "Adult Literacy in Washington," Educational Testing Service, 1994, p. 68.

[32] Workforce Training and Education Coordinating Board estimates based on the 1990 census.

[33]"Income Assistance, Social Services, and Medical Assistance," Department of Social and Health Services, 1998, and "A Baseline Analysis of TANF One-Parent Families," February, 1998.

[34] Washington State Migrant Council, 1998.

[35] "1998 Long-Term Economic and Labor Forecast for Washington," Washington State Office of Financial Management, p. 28.

[36] "Workforce Training Results—1998," Workforce Training and Education Coordinating Board, 1998, p. 26.

[37] Department of Social and Health Services, 1998.

[38] Office of Superintendent of Public Instruction, 1998.

[39] "Research Report No. 97–4," Washington State Board for Community and Technical Colleges; Education Division, June 1997, p. 4.

[40] Ibid., p. 8.

[41] "Workforce Training Results—1998," Workforce Training and Education Coordinating Board, 1998, pp. 13, 65.

[42] "Research Report No. 97–4," Washington State Board for Community and Technical Colleges, p. 12.

[43] "Personnel by Position and Ethnicity," Office of Superintendent of Public Instruction, 1998.

[44] Ibid.

[45] "Workforce Training Results—1998," Workforce Training and Education Coordinating Board, 1998, p. xvi.

[46] "Introduction to Personnel," AYR 1996–97, Washington State Board for Community and Technical Colleges, 1997, p. 49.

[47] "Personnel by Position and Gender," Office of Superintendent of Public Instruction, 1998.

[48] "Population Forecast by Race/Ethnicity, Age, and Sex," Washington State Office of Financial Management, October, 1996, p. 3.

[49] The 1998 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance Trust Fund, 1998.

[50] "Workforce Training: Supply, Demand, and Gaps," Workforce Training and Education Coordinating Board, 1998, p. 21.

[51] 1997 Data Book, Washington State Office of Financial Management, p. 99.

[52] Final Report: Governor's Council on School-to-Work Transition, 1995, p. 5.

TODAY'S WORKFORCE TRAINING SYSTEM

Will We Meet the Challenge?

Our global, competition-driven economy and the changing composition of our workforce present Washington's education and training system with immediate and important challenges. Facing these challenges is a system that encompasses 16 state and federal programs, hundreds of education institutions and training providers, and thousands of students, workers, and employers.

To respond to the economic and demographic challenges facing us, the leaders of the state's workforce training system are:

- Improving accountability by adopting competency-based measures, labor market outcomes, and customer satisfaction as the yardsticks of student achievement and of program performance.
- Creating new ways to improve transitions from secondary to postsecondary education and to employment.
- Strengthening the skill content of training programs to more closely match employer needs.
- Increasing coordination among programs in order to provide higher quality, more accessible service.

These initiatives will make the workforce training system more responsive to the needs of students, families, workers, and employers. But, we must do much more. A further examination of these efforts illustrates our current progress and suggests our future agenda.

–Continued–

Programs of the state's training system (as defined in RCW 28C.18.010[3]) focus on education and training for jobs that do not require a baccalaureate degree—the education and training that prepares individuals for 80 percent of all jobs.

PROGRAMS	PUBLIC FUNDING[1]	PERCENT OF TOTAL
Programs for Adults		**38.98%**
Postsecondary Vocational-Technical Education at Community and Technical Colleges	$185,775,000	29.63%
Federal Vocational Education *Postsecondary*	$9,866,000	1.57%
Private Career Schools[2]		
Job Skills Program	$662,000	.11%
Apprenticeship Program *Administration Only*	$771,000	.12%
Dislocated Workers Program *JTPA Title III*	$20,532,000	3.27%
Worker Retraining Program *ESHB 1988*	$26,810,000	4.28%
Programs for Adults With Barriers to Employment		**14.92%**
Disadvantaged Adult Training Program *JTPA Title II-A*	$16,896,000	2.69%
Adult Education and Basic Skills	$75,109,000	11.98%
Supplemental English-as-a-Second Language	$560,000	.09%
Volunteer Tutor Coordination Program	$247,000	.04%
Project Even Start *State Funds*	$741,000	.12%
Programs for Youth		**46.10%**
Secondary Vocational-Technical Education	$254,985,000	40.67%
Federal Vocational Education *Secondary*	$8,515,000	1.36%
Even Start Family Literacy Programs *Federal Funds*	$1,358,000	.22%
Disadvantaged Youth Training Programs *JTPA Titles II-B and II-C*	$18,384,000	2.93%
School-to-Work Transition	$5,810,000	.93%
Total Public Funds	**$627,021,000**	**100%**

[1] Public funding as reported on page iii of WTECB's *Workforce Development Directory—1997.*
[2] Private career schools are not appropriated public funds; students are, however, eligible to receive financial aid.

WTECB's Role: Planning, Coordination, and Evaluation

The economic and demographic imperatives for workforce training and the fragmented nature of the workforce training and education system created a need for a coordinated, statewide approach to planning, coordinating, and evaluating Washington's workforce training efforts. The Workforce Training and Education Coordinating Board was established to address these issues and advise the Governor and the Legislature.

WTECB's responsibilities cover secondary vocational education, community and technical college vocational programs, apprenticeships, programs governed by the Job Training Partnership Act, and programs for adult literacy. In addition, the Board licenses private vocational schools and administers the Carl Perkins Act and the Job Skills Program.

Developing and maintaining the comprehensive plan for workforce training is one of the primary tasks given to WTECB by its founding legislation. Other responsibilities assigned by the Legislature are:

- Review the state's workforce training and education system for consistency with the plan.
- Promote coordination among workforce training and education programs at the state and regional levels.
- Assess the workforce training and education needs of employers and workers.
- Evaluate the results of the training system as a whole and establish minimum standards for evaluating programs within the system.
- Advocate for the workforce training and education system to meet the needs of employers and workers.

Seeing the Parts as a System

Public funding for the state workforce training system comes from both state and federal sources. Total funding for 1996 was $628 million. Of this amount, the state provided 87 percent ($543.7 million) and the federal government 13 percent ($84.3 million). The 3 public agency members of WTECB receive almost 100 percent of this funding. They are the Office of Superintendent of Public Instruction, the State Board for Community and Technical Colleges, and the Employment Security Department.

Improving Accountability by Managing for Results

WTECB, in cooperation with the state's major workforce training and education agencies and private career schools, adopted the design for a new cross-agency accountability system, "Performance Management for Continuous Improvement" (PMCI).

PMCI identifies seven desired outcomes for the workforce development system as a whole that focus on the difference

Office of Superintendent of Public Instruction

Vocational-Technical Education

Secondary vocational-technical training programs provide for the vocational interest of students and the need of industry for a skilled workforce. The program's statewide mission is to prepare all learners for successful roles in families, careers, and communities.

State Board for Community and Technical Colleges

Workforce Training

Job training and retraining programs at community and technical colleges will help students learn a full range of pre-college and basic skills, academic and technical skills they need to get high-wage jobs, and adapt to future career changes.

- The colleges will work closely with employers and labor groups, as well as former students, to make sure their training programs lead to job opportunities for highly trained graduates in emerging, high-wage career fields.
- Colleges will work with employers, labor groups, economic development organizations, and public sector employment specialists to ensure that job training programs are relevant to local needs and enable students to get jobs close to home.
- Job training programs also will be designed to train workers in fields whose services are highly valued in society, such as health care and child care.
- Colleges and the college system will collaborate with public and private organizations to cover the cost of starting or revamping programs and to ensure that instructional equipment remains up-to-date.

State Board for Community and Technical Colleges

Adult Basic Education

Washington State's Adult Basic Education system helps adults become more self-sufficient by being able to function independently, be more productive in a global economy, and exercise the rights and responsibilities of citizenship.

Employment Security Department

The mission of the Employment Security Department is to help people succeed throughout their working lives. The Department carries this out by supporting workers during times of unemployment, by connecting job seekers with employers who have jobs to fill, and by providing business and individuals with the information and tools they need to adapt to a changing economy.

Job Training Partnership Act

Titles II and III

It is the mission of the Job Training Partnership Act to prepare dislocated workers, youth, and adults facing serious barriers to employment for participation in the labor force by providing job training and other services that will result in increased employment and earnings, increased educational and occupational skills, and decreased welfare dependency, thereby improving the quality of the workforce and enhancing the productivity and competitiveness of the nation.

workforce development makes in the lives of program participants, their families, and their communities. These outcomes are not static targets but conditions that should be increasingly true for all people.

Workforce Training Results—1998 was the second biennial outcome evaluation of Washington's workforce training system conducted by WTECB. The purpose of the evaluation was to analyze the results of nine of the largest workforce training programs and to recommend areas for improvement. (The chart on the following page summarizes evaluation results.)

Preparing Our Youth

The education we give to all students in our primary and secondary schools provides a critical foundation for learning throughout their lives. That education must be challenging and fulfilling. It must also provide the basic skills these students will need as adults, as citizens, and as employers and employees.

Today, too few of our young people have the skills required by the high-wage jobs that are the hallmark of a healthy economy. As reported in the first chapter, most employers report difficulty finding job applicants with specific skills for jobs that are open and general workplace skills required in high-performance workplaces. This is true of employers in general and of employers who hire mostly job applicants with a high school education.

Competencies *Washington's workforce possesses the skills and abilities required in the workplace.*	**Common Indicators** • Educational attainment as measured by attaining licensure or certification, academic degrees or equivalents, or other measures of skills. • Basic skills attainment by individual assessments of skill levels. • Participant perception of competencies gained as evidenced by former participant survey responses.
Employment *Washington's workforce finds employment opportunities.*	**Common Indicators** • Employment rate of participants who have left a program. • Employment rate in a field related to occupational training as evidenced by former participant survey results. • Percentage of former participants either employed, in the military, or enrolled in education or training.
Earnings *Washington's workforce achieves a family-wage standard of living from earned income.*	**Common Indicators** • Median earnings of former participants and the change in earnings from preprogram earnings for dislocated workers. • Number of individuals that former participants' median earnings can support at twice the poverty level. • The distribution of former participants' hourly wages.
Productivity *Washington's workforce is productive.*	**Systemwide Indicator not for Individual Programs** • Annual gross business income per worker in Washington.
Reduced Poverty *Washington's workforce lives above poverty.*	**Common Indicators** • Number of individuals that former participants' median earnings can support at the poverty level. • Percentage of former participants receiving TANF.
Customer Satisfaction *Workforce development participants and their employers are satisfied with workforce development services and results.*	**Common Indicators** • Individual satisfaction as evidenced by participant responses to survey questions. • Employers' satisfaction with new employees who are recent program completers, as evidenced by employer survey responses.
Return on Investment *Workforce development programs provide returns that exceed program costs.*	**Common Indicator** • The ratio of program participants' net increase in earnings and employer-provided benefits compared to the public cost of the program.

Postprogram Satisfaction, Employment, and Wages

Workforce Training Results – 1998

PROGRAMS SERVING ADULTS	Community and Technical Colleges Job Preparatory Training	Participants satisfied with the overall quality of their program—91 percent. Employers satisfied with quality of work of new employees/participants—60 percent. Percentage reporting employment 6–9 months later—86 percent. Median postprogram hourly wage—$9.82, 6.2 percent increase in the past 2 years.
	Vocational Training at Private Career Schools	Participants satisfied with the overall quality of their program—77 percent. Employers satisfied with quality of work of new employees/participants—52 percent. Percentage reporting employment 6–9 months later—82 percent. Median postprogram hourly wage—$8.46. Change not available. *Note: These results are based on a nonrandom sample of 16 of the 300 schools and may not reflect the results of all schools.*
	Apprenticeship	Participants satisfied with the overall quality of their program—85 percent. Employers satisfied with quality of work of new employees/participants—N/A. Percentage reporting employment 6–9 months later—93 percent. Median postprogram hourly wage—$17.68. First evaluation; change not available.
PROGRAMS SERVING ADULTS WITH BARRIERS TO EMPLOYMENT	Job Training Partnership Act Title III Dislocated Workers	Participants satisfied with the overall quality of their program—81 percent. Employers satisfied with quality of work of new employees/participants—N/A. Percentage reporting employment 6–9 months later—81 percent. Median postprogram hourly wage—$13.43, 20.4 percent increase in the past 2 years.
	Work-Related Adult Basic Skills Education	Participants satisfied with the overall quality of their program—90 percent. Employers satisfied with quality of work of new employees/participants—71 percent. Percentage reporting employment 6–9 months later—59 percent. Median postprogram hourly wage—$7.54, 4.2 percent increase in the past 2 years.
	Job Training Partnership Act Title II-A	Participants satisfied with the overall quality of their program—91 percent. Employers satisfied with quality of work of new employees/participants—N/A. Percentage reporting employment 6–9 months later—81 percent. Median postprogram hourly wage—$7.69, 8.8 percent increase in the past 2 years.
PROGRAMS SERVING YOUTH	Secondary Vocational-Technical Education	Participants satisfied with the overall quality of their program—95 percent. Employers satisfied with quality of work of new employees/participants—58 percent. Percentage reporting employment 6–9 months later—80 percent. Median postprogram hourly wage—$6.51, 8.5 percent increase in the past 2 years. *Results based on a nonrandom sample of schools.*
	Job Training Partnership Act Title II-C	Participants satisfied with the overall quality of their program—95 percent. Employers satisfied with quality of work of new employees/participants—N/A. Percentage reporting employment 6–9 months later—66 percent. Median postprogram hourly wage—$6.04, 5.6 percent increase in the past 2 years.
	Job Training Partnership Act Title II-B Summer Program	Participants satisfied with the overall quality of their program—96 percent. Employers satisfied with quality of work of new employees/participants—N/A. Percentage of participants continuing their education—88 percent. *Note: This program is designed to keep disadvantaged youth in school.*

Wage increases are not adjusted for inflation.

Washington State Workforce Training and Education Coordinating Board, *Workforce Training Results — 1998.*

Too many students leave school with limited knowledge of the world of work and with little or no information about how to match their interests and abilities to further education and training. Moreover, today, too many students fail to see the relevance or usefulness of what goes on in school. As a result, they are not motivated to study and achieve their full potential. In a WTECB survey of 850 recent high school students, the students said high school was weakest in preparing them to "see the link between school and the 'real world,' understand what is required for success, set goals for the future, and independently solve problems."

What students need are demonstrations of why education is useful and how it relates to their individual futures. They need to see how skills they can obtain in school are used in the workplaces, and they want to understand which specific skills they must master to succeed in the occupations that interest them. They want to know what careers are available to them and how to learn to match their interests to potential occupations. And, to succeed in the economy of the future, they must appreciate the value of postsecondary education and training and how to use the education and training systems throughout their lives.

Building A Competency-Based Education System

Preparing our youth to succeed must begin with the high standards of academic achievement called for in Washington's Performance-Based Education Act of 1992 and the Education Reform Act of 1993. This legislation establishes demonstrated competency as the central measure of student achievement. In a competency-based system, *emphasis is on the demonstrated ability to use skills and knowledge.*

The Education Reform Act provides four goals for student performance:

- **Goal 1**: Read with comprehension, write with skill, and communicate effectively and responsibly in a variety of ways and settings.
- **Goal 2**: Know and apply core concepts and principles of mathematics, social, physical, and life sciences; civics and history; geography; arts; and health and fitness.
- **Goal 3**: Think analytically, logically, and creatively; and to integrate experience and knowledge to form reasoned judgments and solve problems.
- **Goal 4**: Understand the importance of work and how performance, effort, and decisions directly affect future career and educational opportunities.

These are the state's goals for all students. To see if they are mastering core competencies tied to the 4 goals, students will be tested in the 4th, 7th, and 10th grades.

In addition, the state will hold schools and school districts accountable for how well students do in attaining the four goals. Under current law, the Legislature is to adopt a statewide accountability system

Our nation's future economic security, and our ability to flourish as a democratic society, demand a generation of high school graduates with solid academic knowledge, world-class technical skills, conscientious work habits, and eager, creative, and analytical minds.

National Alliance of Business

to evaluate the level of learning occurring in individual schools and school districts at elementary, middle, and high schools. If the competency-based system of student tests and school accountability is in place, the current seat-time requirements of the Basic Education Act will end on September 1, 2000.

Students who have successfully completed the high school assessment are to be awarded a Certificate of Mastery. The Certificate of Mastery is to be obtained by most students at about the age of 16. The Certificate is to be required for graduation, but is not to be the only requirement for graduation. The State Board for Education is currently examining what should be required for graduation in addition to the successful completion of the high school (10th grade) assessment.

Governance of K–12 Vocational Education

Overall policy for K-12 school systems is set by the State Board of Education, whose members are elected by local school boards. The Board's executive officer is the Superintendent of Public Instruction, an elected state official who administers the Office of Superintendent of Public Instruction. Locally elected school boards set policy at the district level.

Districts with approved high school vocational education programs are required to have general advisory councils and a program advisory committee for each vocational program. Some schools have realigned their advisory committees to support the career pathways established for the district. Composed of representatives of business and labor, these councils and committees help the schools match their programs to the needs of local industry.

Connecting School With the Community

In addition to raising the standards for performance, our public education system must ensure that students appreciate how their skills are used in the world around them. For most students, this becomes most visible in the workplace. Whether they enter the state's workforce as student employees, as summer workers, or as full-time entry-level employees, Washington's youth must be prepared to be productive and successful. One way Washington helps students prepare for working futures is through vocational education.

Valuing Vocational Education

Most young people in Washington first encounter the state's workforce training system as they fulfill their high school graduation requirements. Currently, to meet high school graduation requirements, the State Board of Education requires students to complete at least one year of an approved vocational education course, which can range from keyboarding to computer-aided design to marketing. Because of this requirement, school districts containing high schools offer at least one state-approved vocational education program. The extent of vocational offerings varies significantly with district size, location, administrative support, and philosophy, resulting in mixed experiences and opportunities for our state's high school students.

Some students complete an entire vocational sequence. Others take single courses to fulfill their requirement. The

former are more likely to see the connection of academics to the world of work. The latter may not even consider the single courses they take to be related to their working futures.

In addition, ten regional "skills centers" operate under cooperative agreements between two or more school districts. Skills centers offer districts a chance to share the costs of providing well-equipped and staffed sites for vocational and technical education. Skills centers clearly illustrate to many students, including many students at risk of dropping out of school, the direct connection between academic and technical skills and their working futures. Further, skills centers are providing programs to recapture high school dropouts who need to complete high school, but who have difficulty returning to traditional high school campuses.

The value of all vocational education experiences are enhanced when they include rigorous academic content. Therefore, achievement of the same academic standards required of all students assures that vocational students do not receive a less rigorous education, rather a career-focused one. According to WTECB's *Workforce Training Results*, approximately 40 percent of students who complete a vocational sequence enroll in a college or university the year following high school graduation.

While vocational education fulfills the basic requirements of the workplace for some students, it can provide lessons that ***all*** students need. As an increasing number of college students work part and even full-time, the importance of basic work place competencies increases for all students. Throughout Washington, secondary educators are working to increase students' awareness of basic workplace competencies and to ensure that students master these skills before graduation.

Supporting Postsecondary Transitions

The core academic standards the state is defining are those that every student needs, but our youth encompass a myriad of talents and abilities. After achieving the Certificate of Mastery, students will want to pursue their individual goals.

As a result, around the state, schools are preparing students for a range of options after high school, whether to go from high school to full-time employment, apprenticeship, postsecondary career preparation, baccalaureate institutions, or something else.

High School Vocational Courses

Vocational course offerings in Washington's high schools vary significantly with district size, location, the district's philosophy of vocational education, and the administrative support given to vocational education.

Most small high schools offer one or more courses in the areas of agriculture, family and consumer sciences, and business education. A large high school may offer these, plus courses in trade and industry, health occupations, and marketing. Large schools also offer a more courses within each of these areas and may offer a vocational preparatory course in junior high. Historically, however, Washington's large urban school districts have offered fewer vocational courses than do suburban or rural school districts.

To make informed choices, students need opportunities to plan their futures ***and*** access to reliable information about education and skill requirements of careers that interest them. Career guidance, however, needs substantial improvement. WTECB's 1997 survey of recent high school students found only 55 percent reported receiving *any* form of career counseling.

Work-Based Learning in Washington State

Youth Maritime Training Association Collaborates With Seattle Public Schools

The maritime industry is one of the largest employers in the Puget Sound area. Keeping vessels at sea and sustaining waterborne commerce demands a highly specialized community of skilled workers. There are 14 occupational categories with over 200 job areas represented, but the industry has found that few individuals know how to prepare for a career or qualify for a job in this field.

Youth Maritime Training Association is a nonprofit volunteer organization formed by representatives of maritime employers and labor organizations. It is dedicated to expanding youth awareness and facilitating training and education. Through WTECB, they received a Work-Based Learning grant to develop a collaborative effort with Seattle Public Schools. The project, the Ballard Maritime Institute (BMI), provides high school students with classroom and work-based learning opportunities in the maritime industry. BMI opens bridges to maritime employment and builds understanding of entry-level job, and high-wage career opportunities afloat and ashore.

Starting in 10th grade, BMI students study the shipping, fishing, passenger, and tugboat industries, as well as marine-related sciences and literature. They learn industry organization and practices and receive training in seamanship and marine engineering. Classroom sessions are augmented by industry visits, paid summer internships, and extended field trips during the senior year. Students are prepared to enter the maritime workforce directly or continue training at a technical school, community college, university, or Maritime Academy.

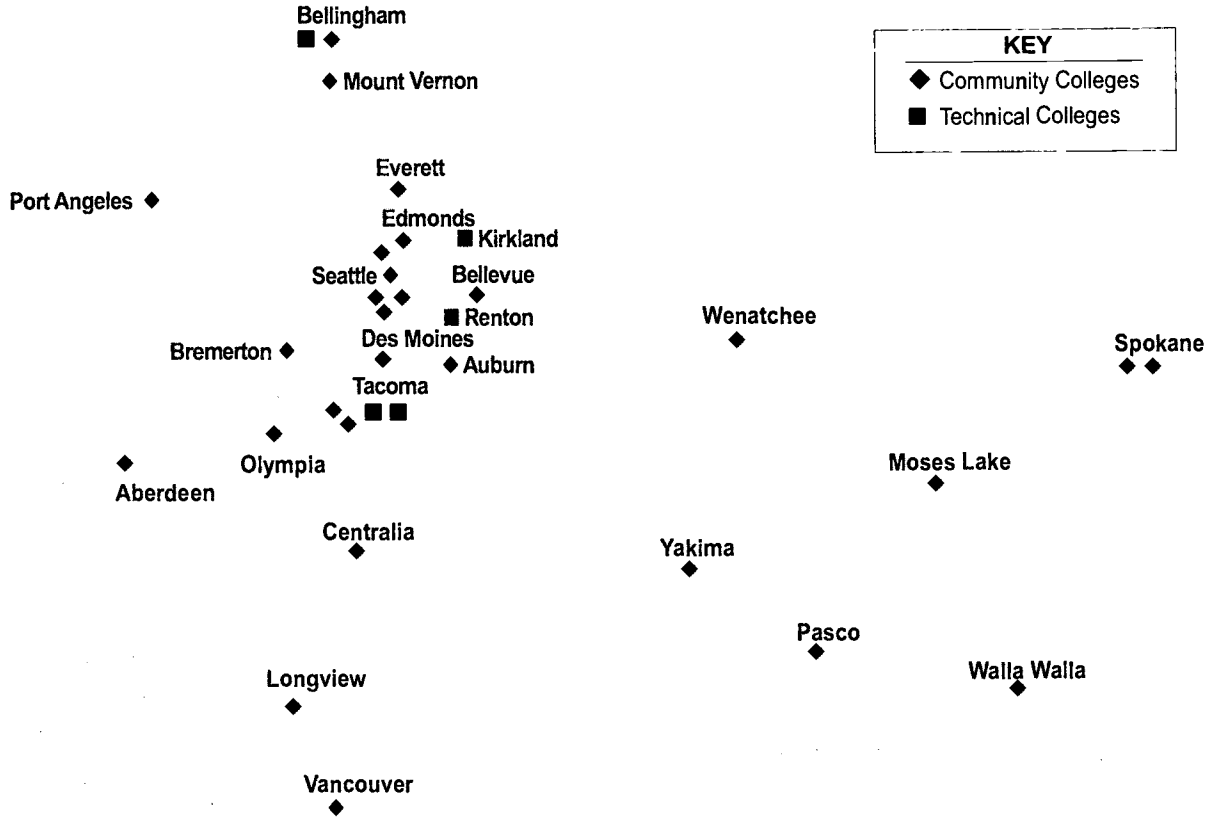
To improve students' transitions to life after high school, schools are partnering with community and technical colleges and baccalaureate institutions to improve the coordination between secondary and postsecondary education. Running Start, Tech Prep, College in the High School, Advanced Placement courses—all are examples of options increasingly available to students so they can prepare for education after high school. Schools are also partnering with apprenticeship programs and directly with employers so students seeking preparation for specific kinds of employment can right in high school.

Community and Technical Colleges

In fact, most of today's high school graduates will enroll in some form of postsecondary education or training. The majority will attend the state's community and technical colleges.

These colleges are the backbone of the state's adult workforce training system, providing training in 200 technical and professional occupations. The state's 32 community and technical colleges served 435,390 students in state fiscal year 1996 (7/1/96–6/30/97). Forty percent of the colleges' course offerings are vocational, including job-preparatory training, related classroom instruction for apprenticeship programs, retraining for dislocated workers, and upgrading of skills for those already employed. Besides vocational training, other mission areas of the colleges are basic skills education, academic transfer to baccalaureate programs, and opportunities for avocational classes.

Community and Technical Colleges



- ■ Bates Technical College *(Tacoma)*
- ◆ Bellevue Community College
- ■ Bellingham Technical College
- ◆ Big Bend Community College *(Moses Lake)*
- ◆ Centralia Community College
- ◆ Clark College *(Vancouver)*
- ■ Clover Park Technical College *(Tacoma/Steilacoom)*
- ◆ Columbia Basin College *(Pasco)*
- ◆ Edmonds Community College
- ◆ Everett Community College
- ◆ Grays Harbor College *(Aberdeen)*
- ◆ Green River Community College (Auburn)
- ◆ Highline Community College (Des *Moines)*
- ■ Lake Washington Technical College *(Kirkland)*
- ◆ Lower Columbia College *(Longview)*
- ◆ North Seattle Community College
- ◆ Olympic College *(Bremerton)*
- ◆ Peninsula College *(Port Angeles)*
- ◆ Pierce College *(Tacoma)*
- ■ Renton Technical College
- ◆ Seattle Central Community College
- ◆ Seattle Vocational Institute
- ◆ Shoreline Community College *(Seattle)*
- ◆ Skagit Valley College *(Mount Vernon)*
- ◆ South Puget Sound Community College *(Olympia)*
- ◆ South Seattle Community College
- ◆ Spokane Community College
- ◆ Spokane Falls Community College
- ◆ Tacoma Community College
- ◆ Walla Walla Community College
- ◆ Wenatchee Valley College
- ◆ Whatcom Community College (Bellingham)
- ◆ Yakima Valley Community College

Funds from the federal Carl D. Perkins Vocational and Applied Technology Act help students obtain skills and competencies needed to work in today's technologically advanced society. Students with special needs receive special emphasis. The funds are also used to help colleges develop competency-based curricula and competency-driven training for instructors, counselors, and administrators.

Community and technical colleges are an integral part of the state's effort to return dislocated workers to high-wage, high-skill jobs as well. Funds authorized by the state Legislature support training opportunities for dislocated workers at the community and technical colleges; they can also be used for training at private career schools or for state-approved apprenticeship programs.

Governance of Community and Technical Colleges

A 9-member State Board for Community and Technical Colleges, appointed by the Governor, oversees the system, which had a budget of $1.3 billion for 1997–99. Each college district has a board of trustees and a general advisory council and/or program advisory committees of private sector representatives to approve, design, and modify occupational programs.

Input from advisory committees is considered essential to quality training programs. Progressive advisory committees are taking an active role to bring their industry expertise to bear in designing curricula, identifying new technologies to be obtained, and participating in the hiring of key instructors.

Additionally, the community and technical colleges lead the state's work to develop clearer definitions of the skills required by Washington's businesses. These voluntary "skill standards" provide the framework for:

- Assessing training needs.
- Communicating performance expectations to employees.
- Clarifying expectations among employers, students, and educators.
- Facilitating curriculum that matches workplace requirements and improves the employability and productivity of students.

Industry-defined skill standards specify what students and employees must know and be able to do within a particular industry and occupation.

SBCTC has organized partnerships among industry groups, 2-year colleges, K–12 schools, and 4-year universities to develop skill standards. Steps include:

1. Compiling employer skill requirements.
2. Convening employer/worker focus groups to determine skill relevancy to the state labor market.
3. Validating the work through representative samples of the industry.

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A business/labor/education advisory committee is developing assessment tools to measure students' skill levels, and is working with faculty to create curricula designed to teach to the standards.

Educators will use the standards to certify the skills of students, to develop new curricula and instructional strategies, and for career guidance and counseling. Skill standards will have special applicability in Tech Prep programs that articulate the last two years of high school with the first two years of college. Skill standards will be the glue that holds the training system together, enabling vertical and horizontal articulation between programs. Programs will be able to recognize the skills of incoming participants, no matter where those skills were learned—on a job, in high school, at a 2-year college, or though some other public or private program. Instructors will not have to repeat what participants already know. And, when individuals are certified as meeting industry standards, employers will have a convenient tool by which to judge the skills of job applicants.

Adult Basic Skills and Literacy Programs

Adult basic skills and English-as-a-Second-Language instruction is provided by a network of organizations, including community and technical colleges, community-based organizations, correctional facilities, libraries, volunteer tutoring programs, and corporate training programs. The state's adult basic skills delivery system served approximately 55,000 adults in Program Year 1996 (7/1/96-6/30/97).

Statewide literacy efforts are directed by the Office of Adult Literacy (OAL) at SBCTC and by the Washington Advisory Council on Adult Education. The Council advises the Governor, SBCTC, and WTECB on a variety of matters, including recommendations on the development and implementation of measurable state literacy and adult education goals. OAL administers the federal Adult Education Act grant and prepares a 5-year state plan for adult education.

By becoming involved in their local community colleges, corporate managers can greatly enhance the skills of the general labor pool—and possibly of their own future workforce.

Paul J. Kauffman, Jr.
Division of Engineering and Technology, Nelson Community College, Hampton, Virginia

Industry Partnerships

Some of the industry partners participating in skill standard development include The Boeing Company, the Washington Electronics Association, the Washington Software Association, the Washington Retail Association, and the Northwest Food Processors Association. Currently, 18 different skill standards projects are in various stages of development: information technology, allied oral health, cosmetology, telecommunications, chiropractic technicians, manufacturing, retail/wholesale trade, natural resources technology, secondary wood products, law enforcement, food processing, audiology/hearing aid technology, early childhood education, vocational instructors, para-educators, travel and tourism, and optician technology. Washington is also working with neighboring states to develop portable skill certificates for the retail and financial services industries.

Federally Funded Workforce Development Programs: An Evolving System

Over the past several decades, the federal government has supported training and employment services for targeted parts of the population. Among these groups are the economically disadvantaged, dislocated workers, veterans, the disabled, workers with basic skill deficiencies, and welfare recipients.

Federal funding represents a small (13 percent) but influential contribution to the state's overall workforce training system. Federal programs are driven by federal laws and regulations that set program eligibility, fiscal requirements, and program goals.

State agencies administer the majority of the federally funded workforce training programs; ultimately, services are delivered locally. State-level administrative structures tend to parallel complex federal structures, and local service delivery structures are varied and complicated.

In August of 1998, Congress passed the Workforce Investment Act (WIA) to improve the quality of the workforce through investments in training and related services that increase the employment, retention, earnings, and occupational skills of participants. Title I does this through three funding streams, providing services to youth, adults, and dislocated workers.

The Act calls for a 5-year state plan for workforce investment. Local boards will be given flexibility within the plan to set priorities for their region while accountability for results will be a responsibility shared by the state and local boards. Services are to be provided through the One-Stop Career Development system. Individual Training Accounts will be established for eligible participants, and training for those currently employed is allowed. Changes brought about by this legislation will be planned for and implemented during the next two years.

Washington has been ahead of Congress in beginning several key elements in WIA. The common performance measures for Washington's workforce development programs, described at the beginning of this chapter, anticipated many of the performance requirements in WIA. The state has already started to design consumer reports of program results (see pp. 84–85). And, as discussed later in this chapter, Washington is already implementing One-Stop access to employment and training services.

Current Federal Workforce Development Programs

Job Training Partnership Act

JTPA supports programs to prepare low-income youth, unskilled adults, and dislocated workers for jobs. Washington's Employment Security Department (ESD) administers the Act at the state level, except as noted below. As required by the Act, the State Job Training Coordinating Council advises the Governor and ESD on the needs of disadvantaged and dislocated workers. On July 1, 2000, JTPA will be replaced by Title I of the Act.

A total of 4,562 youth, 8,463 adults, and 15,280 dislocated workers were served by JTPA Titles II and III in Program Year 1997 (7/1/97–6/30/98). In addition, 6,919 youth were enrolled in the 1997 JTPA Title II-B Summer Youth Program. Most JTPA funds are allocated for use within regional service delivery areas governed by private industry councils. The JTPA system directly provides some services and purchases others. Training may be conducted through contracts with schools, public agencies, and community-based organizations. JTPA provides and coordinates resources that can assist disadvantaged youth, adults with low skills and multiple barriers to employment, or those in need of new skills for new occupations after dislocation due to plant closures or permanent layoffs.

Employment Service

Employers seeking workers and workers seeking jobs may turn to an employment service system created by the Wagner-Peyser Act of 1933. In 1997, the state's Wagner-Peyser grant totaled approximately $15.5 million. Services are currently delivered through ESD's 28 job service centers and 31 community and technical college collocation sites. Specific services include:

- Accepting applications from job seekers and job listings from employers.
- Matching applicants with jobs.
- Providing job search assistance, labor market, and occupational information.
- Supplying referrals to training, jobs, or other services.

Wagner-Peyser Funds and Other Funding Sources

The services provided by this system are as important to a fair labor "exchange" today as they were when the system was created 65 years ago. Where and how these services are delivered, however, is undergoing considerable change in order to assure that the system addresses the contemporary needs and demands of employers and workers ***and*** to take advantage of technology to improve access and quality.

JTPA's Seven Primary Funding Categories

TITLE II-A SERVICES FOR LOW-INCOME ADULTS	Provides individualized delivery of skills assessment, career counseling, basic and occupational skills training, on-the-job training, and job search and placement assistance.
TITLE II-B SUMMER YOUTH PROGRAM	Provides paid work experience for low-income youth to explore careers and learn basic work habits and, if needed, remedial education classes while employed.
TITLE II-C YEAR-ROUND YOUTH PROGRAM	Provides dropouts and at-risk students work-based learning opportunities and remedial education.
TITLE III DISLOCATED WORKER PROGRAM	Provides response and readjustment services, career counseling, retraining, and job placement assistance.
TITLE IV-A MIGRANT SEASONAL FARM WORKER PROGRAM	Prepares low-income adult farm workers for higher paying jobs in emerging industries (administered by Washington Migrant Council).
TITLE IV-A NATIVE AMERICAN EMPLOYMENT & TRAINING PROG.	Provides training resources to tribes, bands, and groups eligible for assistance.
TITLE IV-B JOB CORPS PROGRAM	Offers training to economically disadvantaged youth (14–24) at 4 residential sites in Washington.

In 1997, the State Job Training Coordinating Council formed a Task Force to assess employer and job seeker priority needs and analyze ESD's capacity to meet them. The Task Force issued a set of recommendations to the Department that places emphasis on providing services through a greater reliance on self-service activities and group services as additional points of entry to an information-rich environment. This approach makes it possible to serve greater numbers of people, provide multiple points of entry into employment services, and focus one-to-one services on those most in need of intensive services. A primary delivery tool for employers and job seekers is electronic job matching that gives each access to the other.

Mission Statement from the Southwest Washington One-Stop Partnership

(Southwest Washington is one of 12 One-Stop Regional Partnerships)

The Southwest Washington One-Stop system provides integrated services for all individuals in pursuit of suitable employment for wage progression and independence and for employers seeking to hire or build the skills of employees. The services are collaborative, effective, and comprehensive. Business, economic development, education and training institutions, labor, employment services, and social services are brought together to plan and provide universal access to employment, worker development, and training.

One reason for changing services arises from the change in the needs of job seekers. When the federal employment system was created, the most common cause of unemployment was cyclical reductions in demand. Then, a laid-off worker had a reasonable expectation of returning to the same job or obtaining the same type of job in another firm.

While this is still true for some occupations, layoffs today are increasingly due to structural changes. Laid-off employees will not be called back by employers who have closed, moved, or eliminated the need for certain types of skills. Workers who have lost these jobs often find the skills they have are obsolete in the rapidly changing market place. Before they can be reemployed, they often need training to upgrade their skills or acquire new ones.

Another cause for change comes from the unintended consequences of federal programs designed to address specific, rather than general, employment issues. Historically, the federal government has tried to respond to economic disruptions with new programs dedicated to specific causes of unemployment: defense closures, environmental restrictions, trade agreements, or other causes of economic restructuring. Similarly, the federal government has often created employment assistance programs targeted to the unemployed of a specific type: unemployed youth, those with low literacy skills, or those with English-as-a-Second-Language. The resulting proliferation of separate programs makes it difficult for people to know what services are available for them and where to get them.

One-Stop Career Development Centers

Washington's employers and workers will have a new place to turn for easier access to workforce services and information with the launch of a One-Stop Career Development Center system beginning in 1999. The new approach, which was recently mandated through federal legislation, will connect the employment-related services of many different providers and make them available in one stop, in person, or electronically.

State organizations with the largest number of customers in the employment system have been working together with representatives of business, labor, and WTECB to make One-Stop a success. Those organizations are the Employment Security Department, the State Board for Community and Technical Colleges, the Department of Social and Health Services, the Department of Labor and Industries, and directors of the JTPA service delivery areas.

Twelve One-Stop regional partnerships have been established to bridge state planning and infrastructure with local service delivery. Focusing on the unique needs of local communities, these partnerships have developed 2-year business plans for implementing the new system.

The backbone of Washington's One-Stop system will be a network of Career Development Centers conveniently located across the state. Affiliate sites that serve special populations will also be electronically linked to the One-Stop system, and self-service stations will be offered to customers needing limited, personalized assistance. The One-Stop effort is supported by a $9.96 million grant form the U.S. Department of Labor. By June 2000, the One-Stop Career Center system will be operating to meet the following goals:

1. Be accessible to all people and employers.
2. Be focused on the needs and choices of the customers, both job-seekers and employers.
3. Provide services that are integrated.
4. Be accountable for outcomes.

Providing the Best Labor Market Information

Washington's Interactive Labor Market Access (WILMA) is an easy-to-use electronic system for accessing

A New Dimension for Electronic Labor Exchange

The Employment Security Department is hosting powerful information on an Internet site (www.wa.gov/work) that opens valuable electronic pathways for both job seekers and employers. The Department manages the state's link to a nationwide public electronic network called *America's Job Bank*. After a simple on-line registration, job seekers can enter their resume in a nationally-linked "talent bank"; access regional, state, and national labor market information; and conduct job searches for job openings from here to Maine. Registered employers have many options: they can ask local Job Service Center staff to search for job applicants and/or use the "America's Job Bank" electronic system to directly post their job orders, read date-managed resumes in the talent bank, and customize future searches. These developments are essential to meeting the challenges of improving customer services and are key self-service features of the state's One-Stop Career Center System.

information on the job market in Washington State. WILMA is available on CD-ROM or through the Internet at www.wilma.org. WILMA provides a wealth of information on employment projections, occupational descriptions, wage rates, industry-level employment data, and other labor force data. Users can select their labor market area (using computer maps) then customize their search, such as identifying local employers who employ people with particular occupational skills.

Interface Computer Schools

Interface Computer Schools, founded in Spokane in December 1982, and now operating at three Spokane area locations, is an example of a principle that has guided private career school development for nearly three centuries: find an unmet need and fill it. Interface, a closely-held local corporation, attracts students from throughout the Inland Empire who are seeking first-time or upgraded computer skills. Programs range from 36 to 39 weeks duration, including Computer Operation and Business Applications, Computer Applications and Technical Support, and Office Administration and Word Processing. Day and evening classes enhance access for individuals seeking training or retraining. Six- to twelve-week, specialized courses offer personal computer skill improvement to already employed individuals.

Interface Computer Schools takes a "hands-on" approach to instruction and has an active advisory panel drawn from local businesses. Such direct exposure by Interface staff to business practices and computer applications helps to maintain currency in program design and course offerings. The school also designs and conducts customized training for groups of employees in local businesses.

Private Sector Training Providers

To obtain or upgrade the skills needed in Washington's labor market, many Washingtonians will use private sector providers of workforce training and education.

Private Career Schools

Private career schools are independent businesses, most of which are small, that provide occupational training. Nearly 300 such schools operate in Washington, providing between 150 and 175 different instructional programs to approximately 35,000 students.

The 230 private vocational institutions that grant certificates or diplomas are licensed by WTECB, which is advised by the Private Vocational School Advisory Committee. In addition, the state's 57 cosmetology schools are regulated by the Department of Licensing. Eight schools—a number that is small but growing—grant associate and baccalaureate degrees under authority granted by the Higher Education Coordinating Board. No public funds are appropriated for private schools, although eligible students may obtain federal grants and loans to pay for educational expenses if the school they choose has been authorized to participate in U.S. Department of Education student aid programs. Approximately 50 private career schools are also currently approved by WTECB to train eligible veterans and dependents, thus providing access to Veterans Administration educational benefits.

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Private career schools are partners in the workforce training and education system, voluntarily contributing to many aspects of the system's growth and development. They gather and report annual demographic data of value to WTECB's "Gap Analysis" and are active contributors to the accountability system. Private career schools are represented on the WTECB interagency committee and the steering committee for the "Performance Management for Continuous Improvement" initiative.

Apprenticeship Programs

Contributions from employers and journeyman workers fund more than 395 apprenticeship programs, which enrolled nearly 12,607 apprentices in 1997. Each provides a combination of on-the-job training and classroom instruction in skilled construction, maintenance, and operating crafts.

Apprenticeship programs are supervised by joint labor-management committees that approve curricula, monitor quality, screen applicants, and ensure that skills are portable. The Washington State Apprenticeship and Training Council oversees apprenticeship training programs statewide. The Council's administrative arm is the Apprenticeship and Training Division of the Department of Labor and Industries.

Despite the seemingly large number of apprenticeship programs, more occupations could use apprenticeship as a method of preparing employees.

Apprenticeship and Nontraditional Employment for Women

Apprenticeship and Nontraditional Employment for Women (ANEW) was founded by organized labor, employers, Renton Technical College, and government representatives. ANEW's initial mission was to create training opportunities for women unqualified yet interested in entering trades careers. Having enrolled over 1,400 women in training since 1980, ANEW has expanded its mission to create opportunities for both men and women to enter and progress in trades careers. All ANEW's participants live below the poverty level. ANEW services include recruitment, counseling, life skills training, job search, and placement assistance with over 200 employers, unions, and apprenticeship programs. ANEW provides training and employment services through three major programs:

- **Job Skills for Trade and Industry** Since 1980, ANEW has sponsored a multi-trades training class in partnership with Renton Technical College. For 1997–1998, 77 percent of all women enrolled were placed with an average wage at placement of $11.20 an hour.

- **Apprenticeship Opportunities Project (AOP)** AOP offers information on apprenticeship programs, guidance on choosing a trade, and assistance in applying to an apprenticeship. Of the 76 placed in apprenticeships and the 26 placed in family-wage jobs in 1998, the average starting wage of these men and women was $11.53 an hour.

- **Seattle Housing Authority Works (SHA Works)** SHA Works offers Seattle Housing Authority residents over three months of trade skills training, plus GED preparation. The preapprenticeship training is provided in cooperation with Seattle City Light, Seattle Conservation Corp., King County Carpenters, N.W. Painters, and other apprenticeship programs. The average starting wage at placement was $9.92 an hour. Of the 20 men and women who graduated, 85 percent found employment.

The Teaching Firm has produced one of the most significant pieces of research on informal learning we have seen to date. Knowing how people learn informally on the job is an important part of the learning equation. Knowing how to address those needs beyond the formal side of learning will be critical to every training and development effort in the future.

Gary Ashenbrenner, President of ASTD, Puget Sound Chapter, October 1998

The principles of apprenticeship—learning while earning, mentorship, certifying skills, and ensuring skills portability and upgrading—could be extended to many other occupational learning situations for youth and adults.

Employer-Provided Training

The vast majority of Washington employers offer their employees some sort of training. According to a 1997 survey of Washington employers, on-the-job training is provided by 94 percent of all employers. Most commonly, employers train their employees while they are performing their regular job duties. As an example, coworkers often teach an employee how to operate a machine while they themselves are producing a product.

Less common is employer-provided training in a classroom, workshop, or seminar setting. Over the past year 71 percent of Washington employers offered at least 4 hours of such training to their employees. Employer-provided classroom training usually addresses general workplace practices such as safety or job-specific skills. Only about 10 percent of employers offer instruction in the "basic" skills of reading, writing, and mathematics. Studies consistently reveal that managers are about four times as likely as production or service workers to receive classroom training from their employer.

When asked why they don't provide classroom training, about half (46 percent) of employers indicated they were constrained by a lack of resources. Forty-two percent said they are concerned about employee turnover—that is, providing skills to employees who will then leave.

To provide classroom training, employers most commonly turn to a private vendor or their own personnel. Only 14 percent of all firms have an arrangement with a community or technical college, and only 6 percent have used a 4-year college or university to provide classroom training to their current workers. A substantial portion (61 percent) of employers who do not use a community or technical college say they believe the colleges do not supply the kinds of training needed by their employees. The majority (73 percent) of employers who have used a community or technical college to provide training, however, report that they were very satisfied with the training.

Overall, employer-provided classroom training is on the rise. In the last 3 years, 53 percent of Washington employers increased the number of employees they trained. Almost all other employers held the number steady.

Job Skills Program

Sometimes employers can qualify for state assistance for their training needs to ensure that employment is developed and retained for the state.

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The Job Skills Program (JSP) was created by the Legislature in 1983 to bring employers who have specific training needs together with educational institutions that can provide training to their needs. Administered by WTECB, JSP supports customized training for new employees, retraining to prevent dislocation, and training to upgrade the skills of current workers.

During the last biennium, JSP funded 17 projects, involving community and technical colleges, community-based organizations, private training organizations, and 135 businesses throughout the state. More than 2,500 employees received customized training.

JSP provides training for firms newly recruited to the state and supports other economic development strategies, such as the spread of high-performance practices and growth in key economic sectors.

Economic Development and Training

JSP illustrates the vital importance of connections between workforce development and economic development. Workforce training must support economic development strategies so the supply of highly skilled workers is coordinated with demand and training investments help generate family-wage jobs.

As discussed in the first chapter, Washington employers are facing a severe shortage of skilled workers. This shortage is most severe for job

The Teaching Firm Research Project

The Teaching Firm Project is the first major study on how informal learning occurs in the workplace and its impact on productivity and competitiveness.The study found that most learning in the workplace is informal, perhaps as much as 70 percent. Informal learning is where the process of learning is not determined by the employer. Researchers found that informal learning occurs in more than a dozen ways and plays a major role in how individuals learn how to do their jobs.

While informal learning is not consciously structured by employers, there is much that companies can do to take advantage of informal learning to benefit both the firm and employees. The research identified 13 work-related activities that are rich in informal learning. Such activities include: teaming, meetings, customer interactions, and mentoring. The more employees engage in these activities, the more informal learning is likely to occur.

According to Monika Aring, co-director of the project, the study has "profound implications on corporate culture, worker satisfaction, productivity, and improving the rate of innovation."

The 2-year study was conducted by the Center for Workforce Development of the Education Development Center in Newton, Massachusetts. Research included in-depth investigation at seven companies in seven states, including Motorola, The Boeing Company, Ford Electronics, and Siemens.

applicants trained in postsecondary vocational programs. Even counting the thousands of workers moving to Washington each year, the state training system does not supply enough workers trained in the job-specific skills that employers demand. This shortage is limiting the economic development of the state by curtailing productivity, production, and quality.

The expansion of training to meet employer demand can be linked to economic development strategies. For example, in 1993, Snohomish County business, government, and labor leaders adopted *The Strategic Economic and Investment Plan for Snohomish County. Enhance education at all levels* is the very first section. As the Plan states, "A critical component in global competition is top to bottom education." The Snohomish Plan recommends education initiatives that are informed by an assessment of the economic condition of the region and the supply of education resources. The initiatives aim at filling the gap in the education required to enable the county to move from the current economic condition to the desired economy of tomorrow.

For the state, we envision a future economy with high skills and high wages. Our recommendations are designed to take the steps necessary to bridge the gaps between our current training system and the training system of tomorrow.

Investing in New Jobs: Iowa Industrial New Jobs Training Program

Since it was created in 1982, the Iowa Industrial New Jobs Training Program has used a unique financial strategy to fund over 1,200 job training projects and generating nearly $300 million dollars. The program is administered and operated locally by Iowa's 15 community colleges and monitored at the state level by the Iowa Department of Economic Development.

Through a broker, each community college sells public bonds to fund training projects as specified through contracts between the community colleges and employers. Employers repay the bonds by diverting 1.5 to 3 percent of the state income tax withholding revenue that is generated by the new positions for 10 years.

The funds are diverted first to the community colleges to satisfy the debt, then to the Iowa Workforce Development Fund Account. Five additional workforce development programs are funded from this account.

Employers often satisfy their debt before the maturation of the bond.

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Recommendations

To reach our vision of high skills, high wages we must plan our journey carefully. To get there we will have to pull together. We cannot afford the high cost of duplication, fragmentation, and working at cross purposes. We must have a sturdy vehicle that will get all of us through to the vision. To guide us along the way, we must have a clear map—a set of goals and objectives—that will tell us the direction we are headed and guide the programs of the workforce training system. And finally, we must demonstrate commitment to the journey. The following chapter defines our long-term goals, our objectives for the next two years, and the specific actions that should be taken.

Destination: A World-Class Workforce

In the coming century, the driving force of Washington's economy will be the human mind—not, as in the past, our natural resources or even our industrial capacity. In an age of global competition for good jobs, the countries that thrive will be the countries with the best educated, most innovative, and most productive people.

This economic fact of life is a mandate for improving our workforce training and education system. The prosperity and security of our country depends on our ability to become a nation of learners and teachers.

–Continued–

The Starting Line: What Can We Build On?

Washington already is in the forefront of the transition to higher standards of educational achievement and life-long learning.

- We are in the midst of a major restructuring of public education to raise academic achievement expectations and results for all students. Our reform will encourage all students to learn as much as they can, as fast as they choose, because we will measure students' mastery of skills and knowledge rather than the amount of time they spend in class.

- Our community and technical colleges are leaders in the movement to identify what employees need to know and be able to do in specific industries. The identification of industry skill standards is enabling colleges to update curriculum to better match employer needs.

- Our Employment Security Department is engaged in a collaborative effort with other state agencies and local service deliverers to provide employment services to our state's employers and job seekers through One-Stop Career Development Centers across the state.

But, these are just some of the first steps on a long road.

Obstacles in Our Path: What Must We Overcome?

Too many high school students still lack motivation and support and leave school before graduating. For those who stay, it is still too likely they will graduate from high school unprepared for entry-level work and unaware of the skills required by today's employers. Too few graduates today fully understand the connection between their education and their economic future.

Too many participants leave training programs with no clear record of their skills and abilities. They have no piece of paper or electronic record that conveys to employers or postsecondary education what they know and are able to do. Their lack of certification that is widely accepted by a next level hinders their ability to take the next step.

Employers too often are forced to search in other states, or even in other countries, for the skilled labor they cannot find at home.

When they need help, many customers of the workforce development system still face a confusing array of separate programs and agencies—each with different requirements and different forms to be filled out. And, finally, our resources are limited. We will need to get the job done by unprecedented levels of interagency cooperation, creating public-private partnerships, and efficient use of any new funds.

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Today, unfortunately, all the following scenarios are possible:

- A young woman drops out of school or graduates without a clue as to what kind of work she wants to do or what skills she will need to get a good job.

- A worker who spent most of his life earning good money in a mill or factory that is closing learns that his skills will not get him a new job.

- A company is forced to hire job applicants who lack the communication, problem solving, and teamwork skills required for a high-performance workplace. Productivity lags, and the firm is unable to take advantage of new market opportunities.

If we are to have a future where these scenarios become rare occurrences, we must take immediate steps informed by the goals we are headed for.

The Map for Progress: Four Goals for Workforce Training and Education

This plan sets forth four overarching goals for the state's workforce training and education system. They are the goals that the system should work to accomplish over the next five to ten years.

Goal 1: K–12 education will prepare students for both further education and work.
Students will graduate from high school knowing and being able to do what is needed to succeed at both higher education and the world of work.

Goal 2: The gap between economic demand and the supply of postsecondary technical training will be closed.
The state's adult training programs will produce the number of workers with the skills Washington employers need.

Goal 3: The training system will be a coherent and integrated system of customer services.
We will build a network of training and related services that provides customers with easy access and portability among and between programs and avoids unnecessary training.

Goal 4: Training programs will be accountable for results.
Every workforce training and education program will have measured results and quality improvement efforts to improve those results.

Instead of pumping a steady stream of graduates into U.S. businesses, our nation's schools are sending fewer and fewer high school and college students into the workforce with the skills employers need.

Samuel Greengard
Contributing Editor
for Workforce

Objectives and Recommendations

In order to make progress on these four long-term goals, the state must move forward quickly, taking meaningful action. In the following section, we indicate the objectives that should be achieved during the next two years, discuss the underlying issues, and make specific action recommendations to achieve our objectives.

Goal 1: K–12 education will prepare students for both further education and work.

Students will graduate from high school knowing and being able to do what is necessary to succeed at both higher education and the world of work.

Objective 1: Improve career-related learning during high school.

The Issue: In a landmark 1978 court case, the Washington State Supreme Court set forth the following substantive definition of the Legislature's duty in Art. 9, Sec. I, of the State Constitution to make ample provision for education of all children:

> *. . . the State's constitutional duty goes beyond mere reading, writing, and arithmetic. It also embraces the broad educational opportunities needed in the contemporary setting to equip our children for their role as citizens and as potential competitors in today's market as well as in the marketplace of ideas ... [it] would be hollow indeed if the possessor of the right could not compete adequately in our open political system,* ***in the labor market****, or in the marketplace of ideas.* (emphasis added)

While the paramount duty of the state includes preparing students for the world of work, this is one of the weaker areas of our current K–12 system. Both employers and former students indicate that high schools have much to improve in preparing students in work skills. Research on vocational-technical education shows that high school students who complete a sequence of vocational courses generally have positive results, but only about one out of six high school graduates completes a vocational sequence

Employers report concern about the general workplace skills of both vocational completers and other high school graduates. In 1997, WTECB surveyed a representative sample of 1,000 Washington employers. To analyze what employers look for in entry-level workers with a high school education, we separately examined the responses of employers who said that 75 percent or more of their jobs require a high school education but no postsecondary education or training.

Among these employers, the number one difficulty they have in finding qualified job applicants is finding applicants with job-specific skills. Ninety-four percent of employers who have difficulty finding qualified job

applicants have difficulty finding applicants with job-specific skills. For example, they want to hire a high school graduate who knows how to be a machine operator, a clerk, or a health aide, but they have trouble finding such applicants. The second area of widespread difficulty is general workplace skills of good work habits (such as getting to work on time), communication skills, and the ability to solve problems on the job (86 to 94 percent of employers having difficulty). The third area of great difficulty is computer skills (92 percent).

Employers who hire high school graduates report the least difficulty in finding job applicants with the basic skills of reading, writing, and math (47 to 72 percent of employers having difficulty). While these numbers are much too high, and the basic skills of reading, writing, and math are obviously critical and serve as foundation skills for higher level skills, they are ***not*** the skills that employers who hire high school graduates have the greatest difficulty finding in applicants.

In a WTECB survey of 850 recent high school students from 67 schools, former students were asked how well their high school prepared them in developing specific skills. They said that their high school was weakest in preparing them to "See the link between school and the 'real world,' understand what is required for success, set goals for the future, and independently solve problems." Students said that high school was most helpful in developing basic reading, math, and writing skills.

Similar responses from employers and students tell us that secondary schools must improve their focus and performance around education Goals 3 and 4, including the ability to solve problems and "Understand the importance of work and how performance, effort, and decisions directly affect future career and educational opportunities." Schools must also improve their provision of "Opportunities to pursue career and educational objectives through educational pathways that emphasize integration of academic and vocational education," as required under current law.

Recommendation 1: Career-Related Learning in High School

A. The Office of Superintendent of Public Instruction should:

1. Support pilot programs in high schools that broaden educational and career opportunities for students through a combined focus on high academic performance and achievement of workplace and occupational skills.

2. Support the growth and development of community partnerships of business, labor, and educational representatives to support work-based learning, articulation of secondary and postsecondary vocational-technical education, and other strategies that connect school to students' future plans.

If we want all students to have career guidance activities as part of their instructional program, we must set some standards and measure them. If we don't, career guidance activities will continue to be hit or miss.

Mike Bjur, Evergreen School District 114, Vocational Director, testifying September 21, 1998, in Vancouver at WTECB hearings on "High Skills, High Wages"

B. The State Board of Education should include a requirement that students demonstrate their proficiency in workplace skills (such as good work habits, teamwork, accepting supervision) in its new performance-based graduation requirements. WTECB should advise the State Board on what specifically are workplace skills.

Objective 2: Improve career guidance in Washington schools.

The Issue: Under the state's education reform act, Goal 4 is "For all students to develop the knowledge and skills essential to . . . understand the importance of work and how performance, effort, and decisions directly affect future career and educational opportunities." To successfully achieve Goal 4, schools must provide all students with effective career guidance.

To meet the goal, career guidance, however, needs substantial improvement. Crisis counseling, course scheduling, or helping students prepare applications for 4-year colleges are the predominate types of school counseling. The average ratio of students to counselors in Washington high schools is approximately 400 to 1. Too many parents are not included in helping their children plan their futures, including their course selection.

In a 1997 WTECB survey of recent high school students, 55 percent reported having had *any* form of "career counseling." Students rate their high schools the poorest at helping them see the link between school and the real world, set goals for the future, and understand what is required for success.

In addition, WTECB's *Workforce Training Results—1998* revealed that females generally earn less than males, even after achieving the same educational credential. The difference is largely due to their enrolling in fields that prepare them for lower paying jobs than fields generally chosen by men. This demonstrates the importance of providing girls with information about career opportunities and what those opportunities pay so they can make more informed choices about their futures and, perhaps, take advantage of training for higher wage fields.

There is no shortage of career-related information available to assist students and their parents in planning for students' future careers. WTECB publishes a career guide that is now available on the Internet. The Employment Security Department has developed Washington Interactive Labor Market Access, which is also accessible electronically. The Department of Labor and Industries publishes a listing of all registered apprenticeship programs in Washington State. And, there are many proprietary products and locally developed resources available. WTECB established a workgroup on career-related information that catalogued the existing resources. There are significant barriers, however, to schools' effective use of these resources, including no clear state-level direction or model for

career preparation, lack of staff training, and no career guidance program standards or measures.

Recommendation 2: Career Guidance

OSPI should, in cooperation with state and local partners, develop and implement a plan to improve career guidance for Washington's young people.

Objective 3: Establish an accountability system for K–12 education that measures students' preparation for both higher education and work.

The Issue: In 1993, Washington State began a change process for K–12 education to move from "seat-time" requirements to a focus on student performance. The new system will be built on:

- A redefinition of Basic Education around four student learning goals.
- The identification of "essential learnings" for those four goals.
- Assessments of student learning.
- An accountability system.

With the adoption of assessments and a new accountability system, the program offering requirements under the current Basic Education Act will go away. One of these requirements is that secondary schools must have 20 percent of their course offerings in "work skills." This requirement serves as the statutory basis for vocational education.

The new accountability system must ensure that career-related learning continues. Career-related learning includes general workplace skills, such as teamwork. It also includes job skills for specific occupations. There should be indicators that measure career-related learning and incentives to prepare students for the world of work. The accountability system should send educators the message that vocational education is important.

As the Commission on Student Learning has identified the "essential learnings," it has integrated some career elements into them. For example, knowledge of career opportunities that use math and science. But, there are many workplace skills that cannot be tested through a paper and pencil assessment. For example, a student's oral communication, work habits, or teamwork skills. Yet these are three of the skills that employers who hire high school graduates say are the most difficult to find in job applicants. A system whose accountability is based solely on written assessments, therefore, cannot satisfy the Basic Education requirement to prepare students in "work skills."

The importance of vocational education goes beyond acquiring workplace skills. Achieving academic success for many students will be problematic. There will be a need for increased rigor ***and*** relevance. In addition to preparing students for the world of work, vocational education motivates many students to stay in school and be successful learners.

An efficient and effective way of measuring whether schools prepare students for work is measuring whether students who want to work after high school find jobs and what those jobs pay. Over 50 school districts already measure post-school employment and earnings. The cost of extending these measures to all secondary students would be approximately $50,000 more per year.

Post-school measures of postsecondary education are also important. They can be used, among other things, to test whether the statewide assessments are indeed good measures of academic achievement. If they are good measures, there should be a strong positive correlation between students' assessment scores and success in higher education.

Finally, the accountability system should include a measure of graduation or dropout rates in order to ensure that increasing academic standards does not come at the cost of increasing the number of young people who give up on school.

Recommendation 3: K-12 Accountability and Vocational Education

The Governor and Legislature should enact an accountability system that:

A. Reports student post-school experience in the School Performance Report, including employment rate, earnings, and education after high school; and directs whatever entity is assigned the function of further developing the accountability system the task of adding these indicators, and goals for these indicators, to the accountability system.

B. Includes the dropout rate as an accountability measure, and directs an appropriate entity the task of developing improvement goals for the dropout rate.

Goal 2: The gap between economic demand and the supply of post-secondary technical training will be closed.

The state's adult training programs will produce the number of workers with the skills Washington employers need.

Objective 4: Increase the number of students who enroll in and complete postsecondary vocational-technical programs.

The Issue: Employers cannot find enough qualified job applicants to fill job openings. The most severe shortage is for applicants with a vocational credential from a 2-year college or private career school. According to WTECB's 1997 survey of Washington employers, among employers who had difficulty in the last 12 months, 64 percent had "much" difficulty in finding job applicants with a vocational credential, more than had such difficulty finding applicants with any other kind of education.

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Current labor market projections indicate there will be 38,000 job openings per year over the next 5 years for positions that require 2 or 3 years of postsecondary training, but the state's 2-year colleges, private career schools, and apprenticeship programs produce only 19,340 such graduates per year.

Enrollment in community and technical college vocational programs has remained essentially flat over the past five years despite increased funding for colleges. Student growth has been in programs for academic transfer and adult basic skills.

There is no state-level process to match capacity in postsecondary vocational education to labor market demand. The Legislature appropriates money to SBCTC to fund student FTEs. SBCTC then allocates the funds to individual colleges based on past enrollments, plus growth (if funded). Neither the Legislature nor SBCTC earmarks funding for the vocational education mission of the colleges. Funds may be used for vocational education, academic transfer education, or basic skills education. How much funding goes to each of these three mission areas is determined by the individual decisions of students and colleges.

One way to address the shortage of postsecondary vocational education is for the state to earmark funding for the vocational mission of the two-year colleges. Another approach is to change the incentive structure for individual colleges and students as they decide between mission areas of the colleges. This is the approach we suggest. This recommendation addresses the incentives for students. The next recommendation addresses the incentives for colleges.

The primary cultural message in education that we send young people and their parents is that a 4-year baccalaureate degree is the only avenue to financial success and well-being. In fact, only 18 percent of the net job openings in the next 5 years will require a baccalaureate or graduate degree, while the majority of openings will require education beyond high school.

As skill shortages have increased throughout the country, states are developing programs to attract students to the opportunities available with a postsecondary vocational-technical degree or certificate. In Michigan, for example, Governor Engler has begun a $20 million investment in scholarships for 10,000 students who enroll in high-demand technical training associate degree or certificate programs. Florida and Idaho also provide financial assistance for students to pursue vocational-technical degrees.

Beside vocational certificate and degree programs at schools and colleges, apprenticeship programs offer another source of skilled labor. According to a study currently being conducted by the Northwest Policy Center at the University of Washington, the Office of Port JOBS, and the Worker Center—AFL-CIO, developers and contractors

We must break the cycle of public perception that the 4-year college is the ultimate goal for everyone. In the last eight years, graduates of our Ford Technician Training Program average $60,000 to $70,000 a year! We need to start telling this to parents.

Paul Greco, Renton Technical College, testifying September 24, 1998, in SeaTac at WTECB hearings on "High Skills, High Wages"

Apprenticeships are the answer to so many of the recommendations in this plan. As an adult learner myself, I know how difficult it is to get training and earn an income at the same time. Apprenticeship programs allow you to do that while giving you on-the-job experience. Apprenticeships can apply to small business and large businesses. They can be used in rural, as well as metrpolitan areas. They can meet industry standards and industry certification.

Beth Thew, Communications Worker of America, U.S. West Communications, testifying September 28, 1998, in Spokane at WTECB hearings on "High Skills, High Wages"

report concern about a shortage of skilled labor and its impact on construction projects. Over the next 3 to 5 years, the demand for construction workers in the Central Puget Sound region is projected to grow by 7,000 to 12,000 jobs. At the same time, an increasing number of construction workers are nearing retirement. Community-based groups report that entry into apprenticeship programs is sometimes difficult for low-income individuals due to costs such as tools and fees.

Recommendation 4: Vocational-Technical Scholarships

A. The Governor and Legislature should establish an annual fund of up to $9 million for financial assistance covering up to 2 years tuition and fees for students pursuing and completing a degree or certificate in a high-demand, postsecondary vocational-technical program.

B. The Governor and Legislature should establish an annual fund of up to $.5 million to assist low-income individuals with costs associated with entering high-demand apprenticeship programs.

Objective 5: Increase high-wage technical programs at community and technical colleges.

The Issue: As discussed above (see pp. 66–68), there is a shortage of skilled job applicants with a postsecondary vocational credential. Enrollments in community and technical college vocational programs, however, have remained essentially flat despite increased funding to the colleges. As the result of individual decisions made by students and colleges, student growth has been in academic transfer and basic skills programs.

Colleges have a disincentive to offer programs in "high-wage" technical fields. Programs in these fields are expensive to start and operate due to significant investments needed in state-of-the-art equipment and instruction. It is less expensive for colleges to offer academic transfer, basic skills programs, or many of the lower wage vocational programs.

Research shows, however, that higher wage technical programs provide a better net impact on the employment and earnings of students than do programs in lower wage fields. For example,WTECB's net-impact study of the Worker Retraining Program (established by ESHB 1988) found that completion of course work in health-related and technical fields is associated with a significant net increase in long-term earnings (hourly wages times the number of hours of work) compared to the earnings of workers who did not receive retraining. Instruction in low-wage fields, on the other hand, generally had a *negative* net impact on earnings.

According to SBCTC, individuals who completed high-wage fields of study during the 1995–96 school year were paid a median of $13.62 an hour 6 to 9 months after graduation. Only 31 percent

of the students who received vocational-technical education at the colleges, however, were trained in these fields.

Colleges have developed new high-wage programs, but more needs to be done. As new programs are developed at community and technical colleges, best practices include strong partnerships with industry, development and use of skill standards, and work-based learning opportunities. Examples of such practices include the John Deere training program at Walla Walla Community College, the AutoTech program at Shoreline Community College, and the Information Technology program at Bellevue Community College. While our recommendation focuses on operational costs, capital investments will also be required.

Recommendation 5: Program Development Fund for Vocational Training

The Governor and the Legislature should fund a $6 million annual grant program through SBCTC to establish new programs in high-demand, high-wage technical fields. Priority should be given to starting programs that are cooperatively developed with industry, teach to portable skill standards, and provide work-based learning experience.

Objective 6: Increase state investment in job-linked customized training.

The Issue: One of the most effective ways to close the gap for skilled workers is to provide training customized to specific employer job openings. Such "job-linked" training helps to ensure trainees that there is a job waiting at the end of training and ensures that training is designed to meet employer needs. Such training increases the efficiency and effectiveness of training. Unfortunately, Washington ranks dead last among the states in public expenditures on job-linked customized training.

Washington's Legislature has appropriated specially earmarked funds to the community and technical colleges to retrain dislocated workers and to upgrade the skills of low-income workers. But, very little funding is appropriated for training customized for specific employer job openings and to upgrade the skills of employed people. Employers may contract with the colleges to provide such training, but, in the vast majority of cases, the employers must pay the full operating costs. This may be a particular barrier for small- and medium-sized businesses. The only state program designed to defray the cost of training workers for specific job openings, or for upgrading the skills of current workers, is the Job Skills Program.

According to a recent National Governors' Association survey, states spend over $575 million per year on job-linked training. The amount of money spent has jumped approximately 20 percent in just the past year. Washington is last among the 47 states which support this type of training, investing only $650,000 per year in JSP training. Expenditures in other states range from $750,000 in South Dakota to $112 million in California.

JSP allowed Imperial to offer training to employees up front—when the plant opened. It meant quicker training for our employees. They became a lot more capable in a shorter time. Without JSP, our training, and therefore our growth, would have been slower.

Walt Russell, Human Resources Manager, Imperial Fabricating

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In a 1997 review of the state's economic development strategies contracted by the Department of Community, Trade and Economic Development, the skills of the workforce were determined to be the number one economic development issue. The study recommended a $10 million investment in job-linked training. Such training could be used to upgrade the skills of current workers to help Washington firms expand and to attract new firms to locate in the state.

Recommendation 6: Job-Linked Customized Training

The Governor and Legislature should appropriate $10 million annually in job-linked customized training by expanding the Job Skills Program.

Objective 7: Enhance the skills and earnings of low-income workers by increasing instruction in occupational skills.

The Issue: A paramount challenge for low-income workers is meeting employers' qualifications to move *up and out* of low-skill, entry-level positions into positions offering higher wages, benefits, and promotional opportunities. Meeting employers' skill qualifications for higher paying jobs often requires more than adequate basic skills. It usually requires general workplace and specific occupational skills, and it frequently requires computer skills. It also requires adequate child care, counseling, and other support services. Three of the largest programs serving low-income workers are Adult Basic Skills Education, JTPA Title II, and WorkFirst.

Adult Basic Skills Education: Low-income adults face family and economic pressures that make it difficult for them to stay enrolled in basic skills classes long enough to enjoy educational gains. Many get discouraged by their slow progress. Revisions in program design are needed to improve student retention and student outcomes. Field experience, such as the San Jose Minority Female Single Parent Demonstration program, shows adults have increased motivation and gains in employment and future earnings when they are enrolled in basic skills classes that are directly linked to vocational training, work experience, and other work-based learning opportunities.

WTECB's net-impact and cost-benefit evaluation (*Workforce Training Results—1997*, second edition) calculated public investments and earnings over time for adults enrolled in basic skills education at community and technical colleges (these were adults who enrolled for work-related reasons and were not also enrolled in vocational training). During the first three-and-a-half years after leaving college, adult basic skills students experienced increased earnings, but these increases in participant benefits were less than the program costs to the public. The findings indicate that basic skills without vocational training is not cost effective for participants who want to improve their employment situation.

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Job Training Partnership Act: JTPA Title II is the main federally funded training program for low-income individuals. During the next two years, it will be replaced by the new Workforce Investment Act. Many low-income adults served by the JTPA Title II-A program have low literacy skills. Thirty-one percent have not completed the twelfth grade. The program makes it possible for 24 percent of JTPA Title II-A participants to enroll in basic skills classes that are taught in a workplace context and integrated with classroom-based or work-based occupational skills training. Given the low educational attainment of participants prior to entering the program, the program should continue to increase the percentage of JTPA Title II-A participants receiving this type of integrated training. An increased number of JTPA Title II-A participants enrolled in 1995–96 received job-specific skills training and their postprogram employment and earnings were somewhat higher than participants served in 1994–95. This positive trend should be notched even higher.

WorkFirst: The state's WorkFirst program began with an emphasis on recipients' gaining employment. Initially, there was little emphasis on strategies to move public assistance recipients from low-wage, entry-level positions into higher skilled jobs that pay wages that enable individuals to be self-sufficient. In August 1998, Governor Locke announced that caseload savings from WorkFirst would be used for programs to enable wage progression.

Recommendation 7: Wage and Skill Progression for Low-Income Workers

A. The Office of Adult Literacy and SBCTC should continue to strengthen the integration of adult basic skills instruction with occupational skills training, work experience, and computer training. Additional steps should include:

- Incentive grants to sites that integrate basic skills with occupational skills, work experience, and computer training.
- Technical assistance to local grant recipients (colleges and community-based organizations) who currently offer basic skills instruction as a stand-alone activity.

B. Services for low-income individuals currently provided through JTPA, Title II should offer participants, whenever appropriate, the opportunity to enter and complete vocational-technical programs at community colleges, technical colleges, private career schools, or apprenticeships. Training should target occupations and industries that, compared to current results, pay a higher wage and more frequently provide full-time employment. The program should increase by 10 percent, the number of participants (excluding WorkFirst recipients) enrolled in work-based and classroom-based occupational skills training in Program Year 1999 over a comparable group of participants in Program Year 1997.

Recently, this nation embarked on a much-needed reformation of its welfare system. In the meantime, the number of low-skilled jobs is declining. Eventually, there will no longer be even a minimal financial safety net for people who lack basic employ-ability skills. The social ramifications of this situation extend the responsibility beyond industry; it is America's problem, and we must all work together to resolve it.

Grant Thornton, National Association of Manufacturers, "The Skilled Workforce Shortage."

Manufacturers need to commit the necessary financial resources to programs that focus on the vital aspects of their employees' skills and training. Costly? Yes, But, the costs of neglecting the training we need to retain our global economic leadership are even higher. These are costs we must, through wise planning and effective action, avoid ever having to pay.

Jerry Jasinowski
President of the National Association of Manufacturers

C. WorkFirst should use funds from savings in caseload reductions to support wage progression among public assistance recipients and other low-income adults by *combining occupational skills training with work*. Examples include:

- Combining family literacy classes with work-based learning activities.
- Creating part-time occupational skills training programs that fit the schedules of part-time workers.
- Delivering short-term training that meets the needs of employers.
- Arranging workplace basic skills classes at sites where program participants are employed.

Objective 8: Increase employer investments in employee training.

The Issue: There is evidence that employers underinvest in training their own employees, particularly production and service workers and workers with inadequate basic skills. As the President of the National Association of Manufacturers (NAM) declared, "For the United States to maintain its strong leadership position in a growing economy, industry must make greater efforts to prepare workers for the increasing challenges of the high-tech era.... This may even require them to substantially increase the percentage of payroll that they currently invest in those activities." The Board of Directors of NAM have called on all 14,300 member companies to invest 3 percent of payroll on training.

Studies have found that investments in employee training pay off in terms of increased productivity and profits. According to a 1995 study by the University of Pennsylvania, investing in the skills of workers has more than twice the impact on productivity as investing in equipment or facilities.

According to a 1997 WTECB survey of 1,000 employers, 71 percent of Washington employers provided 4 hours or more of classroom training to some employees in the previous years. Nationally, most estimates are that employers invest between 1 and 2 percent of payroll on employee training. In 1990, the U.S. Office of Technology Assessment concluded that employers spent about $385 per employee per year on formal training. A 1995 survey of employers, by the U.S. Department of Labor, found that firms with 50 or more employees spent an average of $300 per employee per year on formal training (not including wages paid to employees while they were in training).

Employer-provided training is most frequently provided to managers. Washington employers estimated that, on the average, they provided 59 percent of their managerial employees with at least 4 hours of classroom training in the last 12 months, but only 14 percent of their production workers and 13 percent of service workers. The U.S. Department of Labor survey found

that employees with a bachelor's or graduate degree were about 50 percent more likely to receive formal training from their employer.

Employers seldom provide instruction in basic skills to their employees. Only 10 percent of Washington employers said they provided even 4 hours of basic skills instruction to any employees in the last 12 months.

Small businesses are less likely to provide classroom training than are large employers. Washington employers with fewer than 25 employees are 40 percent less likely to have provided classroom training in the last year than employers with 100 or more employees. Among all firms that did not provide classroom training, 46 percent said that one reason was the cost of training.

Recommendation 8: Tax Incentives for Employers who Provide Training

The Governor and Legislature should enact tax incentives for employer investments in training their employees. Such incentives should follow the following principles:

- Be easy for firms to start using and easy to exit, and for the state to administer.
- Be of value to the employees.
- Target nonmanagerial employees who are the ones currently least likely to receive training.
- Target small- to medium-sized businesses that are currently less likely to provide training to their workers.
- Avoid subsidizing business behavior that would occur anyway.
- Require investment by the employer to ensure the training is of value to the employer.
- The employer, with the union if the employees are represented by a collective bargaining agent, decides what training occurs.
- Provide safeguards that training providers are legitimate institutions.

Small business employers are so tied to their jobs that they need the help of business associations to work out ways to arrange worker training.

George Reitemeir, Reitemeir/ Stedman, Member of Small Business Improvement Council, testifying September 28, 1998, in Spokane at WTECB hearings on "High Skills, High Wages"

Objective 9: Help small businesses gain better access to the workforce training system.

The Issue: Washington's small businesses generate jobs, create business diversity, and provide our state's workforce with numerous and vital employment opportunities. Yet the workforce training system has no formal method to take into account their unique training needs. Washington's economic vitality will be enhanced if small businesses have easier access to the state's workforce training system.

Close to half of Washington workers are employed by businesses with fewer than 100 employees; and that number is rising. Small businesses are experiencing extraordinary growth. According to the

U.S. Small Business Administration, Washington businesses with fewer than 100 employees created 90 percent of net new jobs between 1992 and 1996.

Unfortunately, small businesses are less likely than large firms to use the training system and are less likely to provide training to their employees. This is unfortunate because studies show that training is a good investment for increasing a firm's productivity (see p. 72). The Governor's Small Business Improvement Council has chosen workforce training as one of its three most pressing issues.

WTECB's 1997 employer survey found that employers with 25 or fewer employees are 40 percent less likely to provide classroom training to their employees than are those with 100 or more employees. While 28 percent of firms with 100 or more employees have had an arrangement with a community or technical college to provide training to their employees, only about 2 percent of small employers with 25 or fewer employees have used a community or technical college to train their incumbent workers. Small businesses are also less likely to be involved with other types of training beside community and technical colleges. For instance, small firms are less likely to be part of apprenticeship programs.

The main reason small businesses are less likely to turn to community and technical colleges, according to the survey, is that they believe the colleges cannot provide the type of training their employees need. But, the same survey found that small employers that have used a community or technical college to train their current workers were satisfied with the training they received.

Recommendation 9: Workforce Training for Small Businesses

The Governor and Legislature should, using existing entities, establish a public-private partnership of local brokers to connect small businesses to workforce training programs and resources. Among private sector organizations that could serve as "brokers" are industry and trade associations and chambers of commerce. Broker services could include communicating small business needs to training providers, pooling the specific training needs of several small employers to create cost-effective demand, and supporting growth of apprenticeship programs. The state should help to network brokers and should provide brokers with technical assistance.

Objective 10: Use the K–20 Technology Network to provide workforce training in rural areas.

The Issue: As Washington State continues to incorporate changes in our education and training system, technology will be an increasingly important tool. Recognizing its importance to education, in 1996 the Legislature allocated $42.3 million to create a K–20 Telecommunications Network. When complete, the network will connect all levels of education, offering Internet, satellite-delivered "distance learning" programs, and videoconferencing capabilities. The Network will be an important tool for increasing training opportunities in rural parts of the state.

Washington State's rural areas have significantly higher levels of unemployment than our urban areas. In fact, Washington was recently ranked as having one of the largest rural-urban income disparities in the nation. One reason for this is the loss of natural resource industries on which rural Washington's economies were so dependent. Economic developers believe, however, that rural Washington's fortunes can turn if they can take advantage of the technological infrastructure that is allowing companies to locate further and further from urban centers. Central to the success of their efforts is a skilled workforce.

The first phase of the K–20 Technology Network project was completed in November 1997. The Network connected the state's university campuses, community and technical colleges, and nine regional educational service districts serving kindergarten through high school. Over the next 2 years, the network will be connected to the state's 296 public school districts, higher education branch campuses, and private four year institutions. Later phases will connect libraries and other sites.

Used strategically, the K–20 Network can dramatically increase the capacity of the workforce training system, especially by using distance learning to reach out to rural areas. By working closely with employers, training programs can use distance learning as one tool for rural economic development—teaching skills that employers need.

Now that the first phase of the K–20 Network is completed, planning for its educational use is underway. For the past two years, the Technology Council, including the community and technical colleges, the Higher Education Coordinating Board, and the Office of Superintendent of Public Instruction, and others have been developing policy for the network. Regional and local planning is also underway as local educators determine how to make best use of the system.

Recommendation 10: Technology and Rural Development

The Community and Technical College system should design and implement ways of using the K–20 Technology Network to provide rural areas with training linked to economic development efforts.

Goal 3: The Training System will be a Coherent and Integrated System of Customer Services.

We will build a network of training and related services that provide customers with easy access and portability among and between programs, and avoids unnecessary duplication.

Objective 11: Integrate the Workforce Investment Act into the state's workforce development system.

The Issue: The Workforce Investment Act of 1998 was signed into law on August 7, 1998. The Act rewrites current federal statutes governing certain federal programs of job training, adult education

and literacy and vocational rehabilitation, replacing them with new guidelines aimed at better service coordination. September 1998 through June 2000 will be a transition period for states to implement the new Act. During this time the Department of Labor will adopt rules under the Act and numerous decisions will need to be made at the state level.

RCW 28C.18.050(3) and (4) identifies WTECB's role in this state process:

> *The board shall provide policy advice for any federal act pertaining to workforce development that is not required by state or federal law to be provided by another state body.*
>
> *Upon enactment of new federal initiatives relating to workforce development, the board shall advise the Governor and the Legislature on mechanisms for integrating the federal initiatives into the state's workforce development system and make recommendations on the legislative and administrative measures necessary to streamline and coordinate state efforts to meet federal guidelines.*

The following are samples of the kinds of decisions that will need to be made to implement the federal Workforce Investment Act:

- Selecting the most appropriate leadership, including representatives of business, labor, and government, to assist the Governor in formulating a state plan for workforce investment including a system for performance management.
- Deciding whether to write a plan limited to what used to be the JTPA Titles II and III and employment services under Wagner-Peyser, or to write a plan encompassing a broader array of workforce development programs such as vocational education.
- Establishing state criteria for workforce investment regions, local boards, plans, and funds.
- Selecting the most appropriate administrative entity or entities to carry out workforce investment activities at the state level, for example, managing the One-Stop Career Center system, and administering labor market information.

Recommendation 11: Workforce Investment Act of 1998

WTECB will develop and make recommendations to the Governor and Legislature regarding mechanisms for integrating the federal Workforce Investment Act of 1998 into Washington's workforce development system and on the Legislative and administrative measures necessary to streamline and coordinate state efforts to meet federal guidelines.

Objective 12: Implement a One-Stop Career Development System for providing employment-related services.

The Issue: Within the workforce development system, agencies and programs provide a large array of employment-related services to

individuals and employers. These services include initial registration, needs assessments, labor market information, job listing, information about training programs, career counseling, and job search assistance. Sometimes these services are unnecessarily duplicative. Individuals may be:

- Asked for basic enrollment information they've already provided, even though the information is on record locally elsewhere for another program.
- Re-assessed and retested to determine their basic skills and employment-related needs, even though their assessment results and test scores are on record elsewhere.
- Enrolled for a service already received.

Eliminating such duplication would improve the efficiency of the workforce development system. To eliminate such duplication requires sharing participant-related information across programs—in some instances, a practice currently prohibited by state law. It also requires the use of common intake, assessment, and other tools across service providers and throughout the state.

Sometimes it is not easy for individuals to obtain the employment-related information they need. WTECB's *Workforce Training Results—1998* found that too many individuals have unfulfilled needs for information about training programs and job

Recommendations on Modification, Consolidation, Initiation, or Elimination of Programs

RCW 28C.18.080 requires the Comprehensive Plan to include recommendations on the modification, consolidation, initiation, or elimination of workforce training and education programs. For this purpose, "the term 'program' shall not refer to the activities of individual institutions such as individual community or technical colleges, common schools, service delivery areas, or job service centers; nor shall it refer to individual fields of study or courses."

WTECB first analyzed the options for consolidating workforce training programs in 1995 and reported that a major obstacle to consolidation was federal laws that required separate categorical programs. The new Workforce Investment Act provides opportunities for greater coordination, and perhaps some consolidation of programs. WTECB will closely examine the Act for these opportunities.

Most of the recommendations in this Plan are actions to modify programs to enhance their efficiency and effectiveness or to improve their coordination. The recommendations included under Goal 3 are particularly aimed at improving coordination. The Plan also recommends two initiatives to close the gap for skilled workers: vocational-technical scholarships and tax incentives for employer-provided training.

The Consumer Report System recommended by the Board (see page p. 84) will put into place a systemwide process for reporting results of local programs to customers so they may be better informed when choosing among and between programs. Under WIA, the Governor will establish a statewide system of standards for provider performance in order for local programs to be eligible to offer training funded by the Act. WIA thus creates an opportunity to terminate services of poorly performing local programs. The information that WTECB has produced on statewide program results (*Workforce Training Results*) will be very useful in establishing these performance standards.

Skill Standards should be a dominant theme—not just for the community and technical college system or the adult basic education system—but for all workforce preparation programs.

Gay Dubigk, Executive Director, Private Industry Council, testifying September 14, 1998, in Bellingham at WTECB hearings on "High Skills, High Wages"

openings. Among a sample of individuals who registered with the state's Employment Service, more than 40 percent did not know whether they were eligible for public training programs. Among participants in 8 of the largest training programs, an average of 52 percent reported needing information on job openings and 36 percent of those who needed the information left their program with these needs unmet.

Washington is currently implementing a new One-Stop Career Development system that will provide employers and workers better access to workforce services and information. The new approach, which was recently mandated through the Workforce Investment Act, will connect the employment and training services of many different providers into a coherent network of resources available at the local, state, and national level. This integration will improve efficiency and effectiveness and make services more accessible and user-friendly.

Recommendation 12: One-Stop Career Development System

A. The Governor and the Legislature should enact legislation authorizing the Commissioner of the Employment Security Department to enter into data-sharing agreements with partners of the One-Stop Career Center system.

B. The Executive Policy Council overseeing the implementation of the State's One-Stop Career Development system should ensure that:

- The One-Stop information system enables program operators to share information on the services that participants receive.
- Participant information is cumulative, and common intake and assessments and other common tools are used to the maximum reasonable extent.

Objective 13: Expand the use of portable skill standards in workforce development programs.

The Issue: Students and other participants in the workforce development system are sometimes unable to move smoothly between programs or between programs and employment. One reason is that too many programs do not teach to widely recognized skill standards that can lead to and offer a credential that is accepted by other programs and by employers. As a result, too many participants repeat lessons they have already learned on a job or in another program or complete one program without acquiring the skills required for entry into the next level of training or employment. Such inefficiencies add to the time that people spend in training and out of the workforce and divert scarce resources from high-need services.

For example, across the state, many JTPA programs do not end in a widely accepted credential certifying the skills that have been mastered. When an individual completes a JTPA program and applies for a job, the employer often has no easy way of judging what that individual knows and is able to do. Similarly, for many secondary students there is no certification available of the workplace skills they have learned. Finally, not all secondary vocational-technical education programs are articulated with postsecondary vocational-technical education.

Skill standards consist of both foundation skills required for any industry and occupational skills needed for a particular occupation or series of occupations. The foundation skills, or workplace skills, consist of such things as good work habits (e.g., getting to work on time), the ability to solve problems on a job, teamwork, and accepting supervision. Workplace skills are "cross-cutting" or transferable; they apply to a wide variety of employment settings.

Most employers report they are having difficulty finding job applicants with workplace skills. In our 1997 survey of employers, among the 73 percent of employers who had difficulty finding qualified job applicants in the last 12 months, 89 percent had difficulty finding applicants with problem solving skills, 85 percent had difficulty finding applicants with good work habits, 75 percent had difficulty finding workers with good teamwork skills, and 73 percent had difficulty finding applicants who accept supervision.

SBCTC is guiding the development of skill standards in this state. Skill standards are developed through a collaborative process between education and industry, both employers and workers. One example is the standards for information technology developed under the leadership of Bellevue Community College. These standards have been recognized around the nation as a model for skill standards. There are currently skill standards under development in 18 industries in Washington State.

But, additional steps are needed to make skill standards portable and applicable to more programs and to gain the efficiencies we seek. There needs to be broad agreement among not only educators, but also business, labor, and providers of "second chance programs" such as programs under JTPA, as to the workplace skills required in the labor market. There needs to be broad agreement on assessment tools. There needs to be widely available and recognized credentials that signify the mastery of workplace and occupational skills. Finally, skill standards need to be developed for more industries and more instructors need to be trained in their use.

Recommendation 13: Portable Skill Standards

A. SBCTC should increase the number of industry-designed skill standards and develop a process for updating existing standards to meet changing industry requirements, support development of skill standards-based curricula and assessments, provide skill standards training and technical assistance for faculty and staff, and design a process for endorsing and issuing skill certificates that are accepted by employers and the next level of learning.

B. OSPI should support development of skill standards-based curricula and assessments to incorporate skill standards in secondary schools, work with SBCTC to provide technical assistance about skill standards for faculty and staff, and create a process for endorsing and issuing skill certificates that are accepted by employers and the next level of learning.

C. The Workforce Training and Education Coordinating Board will convene a working committee (including representatives from business, labor, the Office of Superintendent of Public Instruction, the State Board for Community and Technical Colleges, the Employment Security Department, the Department of Social and Health Services, private industry councils, private career schools, and community-based organizations) to:

- Review recent efforts to identify, assess, and credential workplace skills.
- Make recommendations for next steps leading to a portable credential of workplace competency.

Objective 14: Provide a new State Plan for Adult Literacy that will improve efficiency and effectiveness of adult basic skills education.

The Issue: In 1990, the Advisory Council on Investment in Human Capital reported to the Governor and State Legislature that the adult literacy programs in Washington State were "especially fragmented." In 1991, the State Legislature took an important first step to address this problem by consolidating the administration and policy management of the state's basic skills programs at the Office of Adult Literacy at SBCTC.

The large array of local literacy providers in Washington makes it difficult to coordinate services and focus on a shared direction, a difficulty compounded by the lack of a participant information system for noncollege providers. While adult basic skills students at community and technical colleges are part of a student information system, similar standardized records are not maintained by other providers. This makes it difficult for policymakers and program administrators to analyze the current status of adult basic skills education in the state and to guarantee effective and efficient service.

As discussed on page 72, research shows that only when basic skills instruction is coupled with occupational training, does it generally have a positive impact on employment and earnings. For individuals who enroll in adult basic skills with the

intention of improving their employment situation, their instruction must be integrated with vocational training and/or on-the-job learning.

The State Plan for Adult Literacy was last crafted in 1989. A more contemporary Plan for Adult Literacy is needed to communicate statewide funding priorities and preferred strategies to raise basic skills competencies for adults. A new State Plan is also required by the recently enacted federal Workforce Investment Act. The Office of Adult Literacy and SBCTC are committed to writing a new comprehensive plan, with goals and objectives applying to the whole basic skills delivery system (adult basic education, family literacy, English-as-a-Second-Language instruction, adult GED preparation, literacy for incarcerated adults, and individual literacy tutoring). The Plan will be useful in providing a shared direction for the many agencies who address literacy, whether as a stand-alone document or incorporated into a larger, unified state plan, as permitted under the recently enacted federal Workforce Investment Act.

Recommendation 14: Coordinating Adult Basic Skills Education

The Office of Adult Literacy and SBCTC should develop a new Washington State Plan for Adult Literacy, whether as a stand-alone plan or as part of a unified plan for workforce development as permitted under the newly enacted Workforce Investment Act. The State Plan for Adult Literacy should include, among other things, a description of the information system to be used for participant records, and steps to increase occupational training for participants who enroll for work-related reasons.

Objective 15: Provide for regional coordination of workforce training and education.

The Issue: "High Skills, High Wages 1998" addresses many of the concerns expressed by Legislators that the multiple programs that make up Washington State's training system are not sufficiently coordinated in their planning, operation, and evaluation.

It identifies a strategic direction and goals, objectives, and priorities for the state training system. The recommendations contained in this plan respond to the state's economy. For this plan to be most effective, state-level planning and coordination must be balanced with accommodation to varying regional conditions. Regional planning is required to provide efficient and effective coordination of programs locally, where employers hire and people work and go to school.

At this time, Washington State does not have a structure that allows for regional strategic and comprehensive planning for workforce training and education programs. This means the state has an inadequate design to strategically manage and coordinate its training system.

The Workforce Training and Education Coordinating Board's authorizing statutes assign WTECB the function of providing for regional coordination of workforce training. In response to this

assignment, WTECB analyzed the approach of other states to regional coordination and worked with stakeholders in Washington to propose the piloting of "regional workforce alliances."

In August 1998, WTECB approved funds to pilot a voluntary regional workforce alliance in southwest Washington (Clark, Cowlitz, Skamania, and Wahkiakum Counties). The pilot's workforce alliance is made up of nine voting members (three labor, three business, and three public sector). The alliance will:

1. Assess regional needs and unique challenges, looking at the region's economy, economic planning, demographics, and present and future workforce.
2. Analyze resources available in the region that can address regional workforce needs.
3. Analyze outcomes of workforce development programs in the region.
4. Develop a strategic plan for workforce development with goals, objectives and strategies, and methods for measuring success in meeting goals.
5. Seek consensus among customers and program leaders on the contribution of each program to advance the priorities of the regional strategic plan.
6. Support the One-Stop Career Development Center initiative and help give it a community-wide context.
7. Report results and "value added" of the pilot to WTECB.

The newly enacted federal Workforce Investment Act requires states to establish local workforce investment boards responsible for writing 5-year regional plans.

Recommendation 15: Regional Coordination

WTECB will consider the lessons learned from the voluntary regional alliance pilot, as one source of information, as it prepares its recommendations to the Governor and the Legislature on implementation of the federal Workforce Investment Act's provisions on local workforce investment boards.

Goal 4: Training Programs Will Be Accountable for Results.

Every workforce training and education program will have measured results and quality improvement efforts to improve those results.

Objective 16: Extend the measurement of results to more workforce training and education programs.

The Issue: WTECB evaluates the results of the state's training system every two years. The most recent evaluation, *Workforce Training Results—1998*, includes nine of the largest training programs plus employer-provided training. The public programs account for 90 percent of public expenditures in the training system.[1]

[1] The largest program not included is the Worker Retraining Program (established originally by ESHB 1988). The State Board for Community and Technical Colleges evaluates that program's results as required by statute.

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There remain three large gaps in measuring the results of the state training system:

1. Secondary Vocational-Technical Education: *Workforce Training Results—1998* includes the 53 school districts and 6 vocational skills centers that volunteered to take part in the Graduate Follow-up Study. There remain 183 school districts with vocational-technical education that are not included.

2. Work-Related Adult Basic Skills Education provided at non-college sites: *Workforce Training Results—1998* includes work-related adult basic skills education for students enrolled at a community or technical college. About half of adult literacy students, however, receive instruction from other providers such as community-based organizations, which are currently not a part of the colleges' information system.

3. Private Career Schools: *Workforce Training Results—1998* includes 16 schools that volunteered to take part, these schools account for approximately 30 percent of private career school students in the state, but fewer than 10 percent of the licensed schools.

Under RCW 28C.18, WTECB is to establish standards for program evaluation and data collection for the state training system. WTECB has established such standards as part of the accountability system for workforce development—Performance Management for Continuous Improvement.

The state training system, as defined in statute, does not include the state's welfare-to-work program—WorkFirst. WorkFirst, therefore, is not yet a part of the PMCI accountability system. The subcabinet coordinating the WorkFirst program is in the process of designing postprogram performance measures. These measures will include indicators of employment rates and earnings. It remains to be determined if these measures will be consistent with the employment and earnings measures used by the state training system.

Recommendation 16: Measuring Results

A. OSPI should provide for more comprehensive collection and maintenance of data required to evaluate the results of secondary vocational-technical education.

B. The Office of Adult Literacy should provide for the collection and maintenance of data required to evaluate results from noncollege providers of adult basic skills education.

C. WTECB will require licensed private career schools to collect and maintain data required to evaluate their results.

We believe that accountability is key. It is both the foundation and the measure of all workforce training efforts. It should underlie every recommendation offered, every initiative started, and every evaluation produced.

Steve Dearborn, Greater Vancouver Chamber of Commerce, testifying September 21, 1998, in Vancouver at WTECB hearings on "High Skills, High Wages"

We're pleased that you are furthering the "consumer report" approach to looking at our various training institutions because that will be an important part of customer choice.

Beth Taylor, Executive Director, S.W. Private Industry Council, testifying September 21, 1998, in Vancouver at WTECB hearings on "High Skills, High Wages"

D. As the subcabinet leading WorkFirst, the state's welfare-to-work initiative, continues to refine the program, it should review the definitions for the performance measures for employment and earnings for consistency with the measures used for the training system so that practitioners are supported as they coordinate services to low-income clients.

Objective 17: Implement a consumer report system of training provider results that is readily accessible to participants, potential participants, and employers.

The Issue: There is currently no consistent information across local training programs to let consumers know about the results of training providers. Further, there is an increasing awareness among practitioners and policymakers alike that the education and employment decisions students and workers make have serious long-term effects on family income and deserve to be informed by the best possible information about their choices and options.

A Consumer Report System could provide customers with information on the results of particular training programs at both the state and local levels. If that information shows the performance of a particular program to be poor, customers could choose to avoid it. Such "voting with their feet" could lead to the termination of poor performing programs.

In May of 1997, WTECB adopted a policy framework for a Consumer Report System as the direction for work to proceed on implementation. Part of the framework is consistency with the data and evaluation standards developed as part of the accountability system for workforce development—PMCI. The framework specifies the data that should be reported on participant demographics, program characteristics and outcomes, and stresses that the system should use graphics and other design features to make the information easy to read and use.

In 1998, WTECB, SBCTC, ESD, and OSPI adopted a Memorandum of Agreement that will, among other things, be the basis for coordinating data collection for the Consumer Report System. The recently enacted federal Workforce Investment Act of 1998 requires eligible providers to supply performance and cost information. WIA also establishes a voucher system of individual training accounts. In order for customers to make appropriate decisions about where to spend their training account dollars, they must have good information about training programs.

Recommendation 17: Consumer Reports

ESD should, in cooperation with WTECB, SBCTC, private career schools, private industry councils, apprenticeship programs, and OSPI, implement a consumer report system. The system should be consistent with the standards of the PMCI accountability system and the policy

framework for consumer reports adopted by WTECB. Prior to implementation, the content and format of the reports should be agreed to by the programs included in the reports and by WTECB.

Objective 18: The state's workforce training and education programs should increase their use of quality management principles to improve continuously.

The Issue: In 1997, the Governor ordered state agencies to use quality principles to improve state services. In his Executive Order on Quality, Governor Locke instructed agencies to develop plans for continuous improvement modeled after successful efforts taking place in the private sector. Agencies under the authority of the order were to assess their operations in seven categories: Leadership, Strategic Planning, Customer Focus, Information and Analysis, Employee Focus, Quality Process Improvement, and Performance Measurement. They were instructed to use the assessment results to improve performance. Two years after the Executive Order, results are coming in. State agencies report improved customer service and money savings.

Only part of the workforce training system falls under the direct authority of the Governor's Executive Order on Quality. Yet many of the institutions that make up the system recognize the importance of organizational self-assessment, strategic planning, employee and customer focus, continuous improvement, and accountability for results—key elements of quality management.

In late 1997, each of the state's community and technical colleges submitted an Accountability for Improvement Plan describing planned actions to improve performance in four goal areas. ESD is implementing the Quality Improvement Plan it developed in response to the Governor's Executive Order. The plan, a continuation of efforts begun in 1993, includes a focus on teams, staff involvement in decision-making, and customer involvement. OSPI recently conducted an employee survey of its management practices as part of an organizational self-assessment. It is currently surveying customers and stakeholders about priorities for funding.

In addition to the above internal quality efforts, the major workforce training agencies are actively involved in PMCI, the accountability system for workforce development. PMCI emphasizes continuously improving the results of each workforce training program.

Recommendation 18: Quality Improvement

Workforce training organizations should, consistent with the principles of the Governor's Executive Order on Quality Improvement, complete quality self-assessments, and use the findings to improve performance.

High Skills, High Wages

Washington's Comprehensive Plan for Workforce Training and Education

Washington State
Workforce Training
and Education
Coordinating Board

CE015346

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