The Labor Gap

Businesses in Washington can’t find enough qualified job candidates, and schools aren’t turning them out. Meanwhile, thousands of people remain unemployed.

BY STEVE RENO
After a year of working as a receptionist under an abusive boss at a physical therapy office, Hannah Hurvitz decided to quit and look for something better. Unfortunately, the year was 2008, and job opportunities were disappearing rapidly. She applied for more than 160 receptionist jobs, but received only a few interviews and no offers.

One thing she knew was that even in the midst of the recession there were always jobs available for nurses. Hurvitz began taking prerequisite courses for the nursing program at North Seattle Community College, which she completed in June. Only one major obstacle remains: admission to the nursing program, which received 230 applications this year but accepted just 64 students.

“If you are not at the top of the class, you’re not going to get selected,” she says.

Hurvitz’s dilemma is increasingly common among residents of Washington state. Although there are always thousands of jobs available—there were about 32,000 job openings in Washington during 2009 even in the middle of the recession—most of those jobs either do not pay enough to support someone in a major metropolitan area or demand skill sets not available among the state’s hundreds of thousands of unemployed.

Almost half of the jobs available at any given time are positions such as cashiers, waitstaff and customer service representatives, jobs that pay little and have high turnover. Another 25 percent of the vacancies offer a median wage of $24 an hour, but are in fields such as health care, computer science, engineering and management, for which there is a shortage of talent. In part, this situation is the result of a lack of interest among K-12 students in what teachers call the STEM pipeline: science, technology, engineering and mathematics. But another key obstacle to increase by at least 400 every year beginning in 2010 to meet projected demand.

“Right now we have a little hiatus because the economy has been bad, so hiring has slowed down,” says Linda Tieman, executive director of the Washington Center for Nursing. “But it’s going to reverse as the economy improves.”

**An Education and Training Gap**
The need for more graduates in the STEM areas of study is apparent, but the capacity to produce these graduates does not exist. Washington has 39 entry or “pre-licensure” programs for people wanting to become registered nurses. However, because of lack of available spaces in those programs, approximately 2,700 qualified applicants were turned away this year—which would have been almost enough potential graduates to fill the 3,019 registered nursing jobs projected to become available in four years.

“We don’t necessarily need more schools,” Tieman says. “We need to expand the schools that we have. We’re going backwards here.”

Computer science and engineering industries face a similar problem. The 2009 report showed a shortage of computer software engineers and computer specialists, with 432 and 408 vacancies, respectively. According to a 2009 report by the HECB, state universities are producing less than half the number of computer science majors needed to meet projected demand in 2011.

However, state universities are not able to produce these graduates. Ed Lazowska, the Bill and Melinda Gates Chair in Computer Science and Engineering at the University of Washington, says his program turns away between 50 and 80 percent of qualified applicants each year. These are freshman who have
already been admitted to the UW and have completed all the prerequisites for the computer science and engineering program, but cannot be accepted due to a chronic shortage of student places in the programs.

Would-be college students in Washington state who hope to graduate and find jobs in high-demand industries are not getting the training they need. As a result, these industries end up with vacant positions, which they must fill by recruiting out-of-state or from overseas. The state of Washington ranks first in the nation for the number of college degree holders from out-of-state as a proportion of the total population.

“The question is, does every kid who grows up here and has the interest and the capability have the opportunity to compete for these jobs?” Lazowska says. “And the answer is no.”

It’s not just students who lose in this situation, but businesses as well. Companies like Microsoft and Boeing can recruit new employees from every major campus in the country and can afford to fly them in for job interviews. Startups and small companies have no such luxury, and it’s these new companies that generate many of the jobs in Washington.

“If you’re a 10-person company or a 50-person company, the only thing you can do is go to local job fairs,” Lazowska says.

The reason for the low capacity in education is a lack of funding, caused by the recession. Education programs in the science and engineering fields often take the biggest hits during budget cuts because they require more faculty and more expensive equipment than programs in the liberal arts. Last year, the UW faced a 27 percent budget cut, which led to a 10 percent cut in the computer science and engineering department.

“If you’re trying to save dollars, there’s a pressure to cut the higher cost fields of study first, and it’s hard for institutions to resist that pressure,” Lederer says.

In addition to the cost of equipment, Tieman cites the difficulty of offering competitive salaries to people who are qualified to train students in these highly technical occupations. In 2008, there was a 40 percent increase in the number of people who either declined or resigned from a nursing educator position due to low salary.

“You can leave a community college teaching position and make almost 50 percent more anywhere else,” Tieman says. “It’s just not competitive compensation.”

Public universities are reimbursed by the state with the same amount of money per student regardless of what the students major in, says Bryan Wilson, deputy director of the State Workforce Training and Education Board. Since 2000, the state has provided special high-demand enrollment grants to programs that train students to work in industries that are short staffed. However, in the current budget for 2010-2011, that funding no longer exists. When the economy begins
to improve, Wilson says, the HECB will have to renew this funding, or unemployment will get worse instead of better.

One of the programs that benefits from this funding is the Manufacturing and Supply Chain Management program at Western Washington University. It’s based on finding out what kinds of employees local businesses seek, then training students to fill those positions.

“We see industry—companies that hire our students—as our customers,” program co-founder Peter Haug says.

Graduates earn the highest average starting salary of any of the programs within the College of Business and Economics at WWU. Many of its graduates enter management positions at companies like Microsoft immediately after graduation. Haug says he sees potential for the program to expand into the health care field, but he notes that the program may not be able to expand beyond 50 students per year due to lack of resources.

The idea of tailoring education to match the needs of industry is catching on around the state. The Workforce Development Council of Seattle-King County organizes meetings between CEOs of hiring businesses and presidents of local community and technical colleges in order to find out what kinds of graduates are in demand and bridge the job gap. Last year, the council used federal stimulus money to fund courses at community colleges that train people for jobs in nursing, systems engineering, database administration, medical coding and project management.

Marlena Sessions, CEO of the Workforce Development Council, notes that the success of these programs can’t be measured reliably until later this year, after data are gathered on the employment rate among graduates.

Programs like the Workforce Development Council can only fix part of the problem. Closing this jobs gap is not only necessary to fix our short-term economic troubles, but also to help the state in the long term. A larger health care workforce will be necessary to care for the aging baby boomer generation in the years to come, and more computer specialists and business management professionals will help the growing businesses that support our local economy.

“A key priority for our state ought to be a better education system,” Lazowska says. “We’re really strangling the state’s economy by not investing in this entire educational pipeline.”

Hannah Hurvitz isn’t about to let that narrow pipeline keep her out. “I’m not going to let anything interfere with my goal of becoming a nurse,” she says. “This is literally the opportunity of a lifetime for me.”

As demand for workers in these fields grows, our state will have to find a way to keep up with training. Otherwise, people like Hurvitz who have the desire and the capability will be shut out from the industries that desperately need them.

“I feel like I have a career that I am working toward that will not just make a living,” Hurvitz explains. “But will make a decent living, and I get to provide a service to the community.”

New Partners in Education

SCHOOLS TURN TO INDUSTRY TO FIND OUT WHAT SKILLS ARE NEEDED IN THE WORKFORCE.

In a weak economy with high unemployment and few job openings, some educators are strengthening their relationships with local businesses to ensure that graduating students are trained for the jobs available. This approach is especially valuable in the engineering industry, where technologies are constantly changing and colleges need to stay current in order to produce competitive graduates.

Don Schultz, director of the Professional Automotive Training Center at Shoreline Community College, saw the value in such partnerships when he made a phone call to the Puget Sound Automotive Dealers Association. His goal was to find out what kinds of graduates the local auto industry wanted to hire and to tailor his program to meet their needs.

The result is a program where students graduate not only with a degree and some certifications, Schultz says, but also with a job. They work in a facility that was recently expanded by 24,000 square feet. Local auto dealers donated the $4.2 million needed to build the expansion, as well as the tools, new cars and spare parts with which the students work. In return for their investment, the dealers get a trained workforce. The program graduates about 120 students per year. It also facilitates short training programs for employed technicians to get updated on working with new models, including hybrids and electric cars. Approximately 6,000 to 10,000 working technicians come through for additional training each year.

The next closest training centers for many of these auto dealers are in California, so the program trains a local workforce for local businesses.

The Material Science Technology program at Edmonds Community College has also taken this approach to education. Its courses train students to work with composites, a building material being increasingly put to use in every industry from cars and airplanes to shower stalls.

The program is supported by a board of representatives from Boeing, Airtech Instrument Company Inc. and other local manufacturers who advise the college on the types of training to offer students. There are about 10 graduates per year, some of whom begin jobs at these companies while others go on to universities to earn bachelor’s degrees in fields such as plastics engineering.

Instructor Ross Monroe says he expects a substantial increase in manufacturing jobs in Washington state in the next 5 to 10 years. Since composites are being used more and more in manufacturing, he’s programming training for an emerging field.

As more job opportunities emerge around the state, partnerships between education and business may prove useful to filling in the job gap in some industries.

“I believe the mission of the community college is to serve the community,” Schultz says. “We want to develop partnerships where all the partners win.” —Steve Reno