

## Companies, colleges prepare workers for new economy

by [Ryan Wynne](#)

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Duane Jager, Appliance Depot executive director, said one way to create jobs is to tap the waste stream. Appliance Depot is a self-sustaining nonprofit that gives unemployed people on-the-job experience repairing discarded appliances. Vincent Aiosa | BBJ

According to economists, we are beginning to crawl out of the recessionary ditch we found ourselves in back in December 2007. But we are not out of the trenches yet, and it might be hard to recognize when we are. That's because the economy will look a little different.

“In a single generation, revolutions in technology have transformed the way we live, work and do business. Steel mills that once needed 1,000 workers can now do the same work with 100. Today, just about any company can set up shop, hire workers, and sell their products wherever there’s an Internet connection,” President Barack Obama said in his [2011 State of the Union address](#).

Even before the recession, employers’ expectations of workers’ skills were changing. Now, a lot of the jobs that used to be called the backbone of the U.S. economy will likely play a supporting role.

“Many people ... can probably remember a time when finding a good job meant showing up at a nearby factory or a business downtown. You didn’t always need a degree, and your competition was pretty much limited to your neighbors. If you worked hard, chances are you’d have a job for life, with a decent paycheck and good benefits and the occasional promotion ... That world has changed,” Obama said in his speech.

As this metamorphosis continues, entrepreneurs, activists and lawmakers are trying to create what they see as a more sustainable economy, one based more on the success of small businesses and renewable resource technology, and less on a housing bubble and derivatives trading. No one knows what the end result will look like, but there are people trying to figure it out.

### **Jobs of the future**

Gary Smith, regional director for [WorkSource Northwest](#), said the country is moving further away from an industrial economy and closer to a knowledge-based economy. As we move in that direction, the demand for certain skills will grow.

People who will succeed will focus on their transferable skills: abilities gained through experience that can be applied to meet emerging demands. They will also have strong skills in math, science, technology and engineering, to name a few, he said.

Many of those skills are already in demand locally, and Patricia McKeown, president of [Bellingham Technical College](#) (BTC), believes they are the fields that will recover the fastest.

The college assembles research to determine what local industries are looking for in employees in order to decide what kinds of programs to offer. In addition to the skills listed by Smith, McKeown said, machining, instrument technology, process technology, welding and health care are in demand.

“In the future, health care is obviously an area that’s going to continue to grow,” McKeown said.

That’s because the large baby boomer generation has growing health care needs, and at the same time is beginning to retire from the field. Health care will grow, and although she doesn’t know what it will look like in the future, McKeown said it will look dramatically different.

Surprisingly, though, health care is not the fastest growing field in the area, at least not human health care. In terms of demand for skilled workers, the field of veterinary technologies has experienced the most growth, McKeown said.

### **Conservation and localization**

Another emerging field is [renewable energy technologies](#), and BTC added a renewable energy lab to meet the need for skilled laborers in that field.

Energy conservation has the potential to [create jobs locally](#), said John Sechrest, executive director for the [Innovation Resource Center](#) (IRC), especially considering the high price of oil and the amount of money the government is investing in renewable energy technologies.

“I believe that the economy of the last 30 years and the economy of the next 30 years are dramatically different than each other.” John Sechrest, Innovation Resource Center

[Appliance Depot](#) doesn’t receive government money, but the nonprofit does support conservation efforts, and those efforts supported six living-wage jobs with benefits in 2010. The organization also provided job training for 45 unemployed residents.

Appliance Depot takes discarded appliances, fixes them up and sells them. By tapping the local waste stream, the organization has been able to remain completely self-sustaining and help people with little-to-no work experience, said Duane Jager, Appliance Depot executive director.

“You have to use local resources to create local jobs, and waste is a resource,” Jager said.

Jager and Sechrest said other opportunities can be created by focussing on local resources and local investment.

A localization conversation is occurring, Sechrest said. More energy, clothes and food could be manufactured in Whatcom County, he said, and those things could add to the area's economy and unique culture.

"I think local food is an opportunity," Sechrest said. "If everyone in Whatcom County ate local food 50 percent of the time, that's a \$30 million to \$50 million market."

As oil becomes less available and more expensive, localization will have an opportunity to thrive, Sechrest said.

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This has been called the [jobless recovery](#). Jager said the job recovery will come from communities taking control of their economies by redirecting spending to local businesses.

### **Same name, new requirements**

Not all jobs of the future are new, but many will be different. Jobs may be called the same thing they were in the past, but require new skills to serve new technologies, BTC's McKeown said.

"As things transform, what every job looks like will change," McKeown said. "It's not turn it on, turn it off. It's much more sophisticated."

Technology is evolving so quickly BTC can't teach students using technology from four to five years ago because it's outdated, McKeown said.

BTC isn't just teaching future workers, though. The college is also retraining people who have been laid off and helping some employers retrain their current workers so they can keep up with new technology.

To stay competitive, Bellingham aerospace manufacturer [Heath Tecna](#) will upgrade to a newer version of an engineering software platform, said Laura Henderson, human resources manager for the company. The problem is, they need employees to run that software.

With the help of BTC and a \$168,000 Washington state Job Skills Program grant that Heath Tecna will match, approximately 100 Heath Tecna employees are getting the training needed to use the new software.

Heath Tecna was able to take advantage of BTC's already existing infrastructure, instructors and background knowledge of grants, saving the company money and keeping local jobs with local workers.

Aerospace manufacturing used to be a good bet for someone with no skills looking for a job, but that has changed, Henderson said. As technology continues to advance, employers are demanding new employees who already have manufacturing skills.

"It has raised the bar on what we ask of our employees," Henderson said.

That bar seems to be higher in most industries today. Jobs that only require a high school degree and provide family wages are disappearing fast, Smith from WorkSource said.

While this evolution is different, it's nothing new. Jobs and the skills required to do them consistently change to keep up with technology and even to create new technology.

"Every job will change in some meaningful way," Sechrest from the IRC said.  
"You have got to be able to transform with it."