



PITTSBURGH **PROSPECTS** *Feature* Article

Building Knowledge Town

Local industries cluster to help train and give direction to workers for the jobs of today – and tomorrow. By Christine H. O’Toole

When President Bush suggested in a February appearance here that Pittsburgh should be called “knowledge town,” he struck a chord with an army of local folks: the ones working to make sure that education and skill-building serve the region’s economic needs.

As the region’s most experienced skilled workers retire, openings are popping up in the fields that have been economic mainstays, such as health care, finance and manufacturing. Burgeoning fields like information technology and hospitality offer promise to both CEO wannabes and fledgling tekkies. The question is, can local workers take advantage of those opportunities? Who’s going to help them get there?

A rapidly evolving economy makes predicting and meeting future needs tougher than ever. Job training is only the most visible part of the effort.

“Job training is the on-the-street product of workforce development,” says Ron Painter, executive director of the Three Rivers Workforce Investment Board. The board oversees federally and state-funded workforce and career programs for Pittsburgh and Allegheny County. As Painter sees it, workforce development looks at a three-sided triangle of employer needs, existing workers and education providers – and balances the needs of all three.

Old School Becomes New School

Time was, those at the top of their high school class went to collage. Those at the middle or bottom – well, there were plenty of unskilled jobs right in the neighborhood.

“In industrial cities, many people grew up in a time when you could walk out of the high school, walk down to the mill and get hired,” says Painter. “The kinds of advanced manufacturing that we have seen over the last couple of years here -- and the kinds of skills now required to compete in a global marketplace – make for a disconnect.”

“Each employer has a different set of needs,” adds Ron Cowell, president of the Harrisburg-based Education Policy and Leadership Council, an independent nonprofit group focusing on education advocacy. “Even the most qualified high school grad is not going to cut it. Post-secondary education is increasingly necessary.”

In the Pittsburgh city schools, for example, it’s still a minority that goes on to four-year colleges; 20 percent pursues a degree, while 10 percent goes on to unskilled work. The solid middle, 70 percent, needs help in finding a path to the training that results in long-term careers: at trade schools, community colleges or other community-based programs.

Meanwhile, public efforts have traditionally focused on the immediate needs of existing workers. Regionally, that meant a focus on dislocated workers.

“The public system has always been a rapid-response system: You focus on those who need training right now,” says Steve Mitchell, director of Workforce Connections, a program of the Pennsylvania Economy League. “What you’re asking the WIBs [workforce investment boards] to do is examine needs from a policy perspective.”

Making sure current and future workers have the means to succeed was the original concern of the Regional Workforce Development Initiative, which in 1999 created a checklist of ideas that could help current and future workers. Three years later, local “learning providers”—from high schools to trade schools to research universities – and business groups are taking tentative steps across their traditional divide to provide the training that employers say they need.

The report of the Oversight Committee for the workforce development project, chaired by Pitt chancellor Mark Nordenberg, proposed a Top 10 list of tasks for the region to address. The report stressed a basic premise: Let employers dictate the skills they need. Consensus on those skills would be forged by industry clusters, grouping companies whose workers share the same basic expertise. Those two principles have provided the scaffold for incipient programs.

The Nordenberg report also urged the establishment of one-stop career shopping in centers that would put resources for all kinds of workers in community centers, a definition of the role of community colleges in training, and new tools to appraise work skills.

In the past 18 months, progress has occurred in all three areas. CareerLink centers are not unemployment offices; the federally funded one-stop sources for job counseling, skills assessments and training are open to all. Community colleges continue to build customized training at the request of individual companies, training thousands of workers each year. They are also connected to other training providers through the Regional Learning Network.

This first-ever attempt to organize all schools providing post-high-school training is unique to Pittsburgh, aiming to create a database of opportunities and courses offered throughout the region.

Local school districts are rolling out career-development initiatives, too. In February, the Pittsburgh school board approved its first plan to provide guidance for all, and training for all high schoolers through academies (small learning environments) that will offer specific course work in addition to rigorous basics in math, reading, and science.

Ron Painter approves. "In our minds, Dr. [Johnson] Martin [Pittsburgh Public Schools' career-development director] and the school board made a huge leap forward in recognizing the duality of education: preparing people for the workforce, and academic preparedness."

The career-academy effort is organized by the same industry-cluster idea that drives the employer-driven efforts headed by the local workforce investment boards and Workforce Connections.

Over the past 18 months, five priority clusters – in manufacturing, health care, information technology, financial services, and tourism and hospitality – have organized to consider what job incumbents and applicants should demonstrate. Their most visible efforts have been the workforce "summits" hosted by Allegheny County executive Jim Roddey and Pittsburgh mayor Tom Murphy, which have set agendas for individual groups.

"Clusters are an economic-development tool," says Mitchell of Workforce Connections. "What business strengths do you have? What's the relationship of businesses in your region? How do you draw on that strength? What the WIBs and Workforce Connections and others are doing is to create that link between the economic-development picture and the workforce picture. Everybody's struggling with that."

Within the five clusters, four sets of answers to those questions have emerged, and pilot programs with local schools are under way. (The fifth cluster, in hospitality and tourism, will hold its workforce summit in November.)

Clusters Differ in Goals

The answers sketched within the information – technology sector look at a nascent local industry with an immediate need for high-level professionals: those who design systems on a chip technology or devise gene therapy. "Look at the biotech analysis that's been done," says Mitchell. "If we want to grow biotech, the immediate need is for senior scientists and managers. We're not going to train for that. We'll recruit." Recognizing that the region's overall image is a key factor in luring top people, the Pittsburgh Technology Council has partnered with the Regional Alliance to make sure quality-of-life benchmarks compare as favorably as local IT salaries with other cities.

Down the road, as new IT firms grow, demand for staff and support positions will increase.

Here, students focus on computer applications, robotic technology, and digital logic in addition to academic coursework. Ninety percent of tech grads go to universities and the armed forces: in 2001, half enrolled in Pittsburgh universities.

To assure a future supply of LAN professionals, Pittsburgh Public Schools maintains Cisco Networking Academies, course sequences in computer network design and installation, at three City high schools. In all, the region hosts 17 of these academies, partners with Cisco Systems, at local high schools, vo-tech schools and community colleges.

Recruiting is a top priority in the health-care cluster, as in IT. Toni Scarlata, director of the Health Careers Factory created as a result of the workforce summit, estimates some 1,000 full-time vacancies among local providers right now.

“We got a committee of HR recruiters to develop strategies to attract people from outside the region because, in reality, we do not have enough talent,” she says, referring to all positions in the health-care field. “Institutions are competing with each other. It’s a revolving door, and that’s not in the community’s best interests, an enormous amount of resources are going into recruitment.”

To stem that expense – as high as \$20,000 per nurse – West Penn Hospital recently targeted nurses from Toronto and Manhattan as potential recruits. The missions included real estate professionals who could provide details on affordable housing in the region, important to mid-level professionals relocating families. The first effort brought four Canadian nurses to West Penn. Another effort searched for nursing-home staffers in Puerto Rico.

“We have scale [an array of opportunities at all pay scales and experience levels] in health care – if it doesn’t work out for you in one hospital, you can go to another,” Scarlata explains. “Who does that appeal to? Not the 23-year-old, but the 30-year-old” who would be looking to buy a home and raise a family, and thus would be more attracted by local quality-of-life issues. “So Pittsburgh becomes a very good buy,” she says.

Scarlata says the health-care cluster will continue to look at career-image issues. “When people think of knowledge workers,” she observes. In fact, she says, the career ladder in health care ranges from nursing-home administration to pharmaceutical workers to hospital presidencies. And when 90 percent of nurses are female, and 85 percent of those are Caucasian, Scarlata says, the industry must also address a pronounced lack of diversity.

Community College of Allegheny County has contracted with local nursing-home chains to provide nursing—assistant training for recruits hired by the firms. This method, says program director Mark Mervos, solves a key problem.

“It’s difficult for an individual to afford \$500 or \$600 for job training,” says Mervos, executive director of workforce training and development for CCAC. “We’re trying to identify some sources they can use. But it makes sense for the employer to hire the people they want, then ask us to train them” at the company’s expense.

This fall, students at Peabody High School can enroll in the Pittsburgh school district’s pilot career program in health and medical sciences, in a collaboration with West Penn Hospital.

“We know that people in health care are rarely unemployed, and the incubator for life-science companies is hospitals,” says Scarlata. Today’s entry-level worker, could be tomorrow’s CEO.

In financial services, employers look to local entry-level hires with strong math and reading skills to fill vacancies. In this industry, where turnover among part-time tellers can be as high as 50 percent annually, demand is strong. Leslie Bonner, president of Job House and a member of the financial-services summit steering committee, estimates at least 800 vacancies regionally for folks who can pair academic credentials with customer-service skills: “good communication, good composure – people who can handle whatever is thrown at them. You can’t necessarily teach that. It has to deal with work ethic and maturity.”

Financial-service employers don’t wait for applicants to come to them. Bonner’s downtown Pittsburgh-based firm brings them into the community quite literally, in a mobile RV unit that brings job counseling and opportunities right into neighborhoods.

Alyson Getty, Project Manager of the Workforce Summit Initiative, says the financial-services industry is also beginning to address the work-life balance of its staffers. That can mean listening to workers who need emergency child care, as PNC did when it opened the spacious O’Brien Family Center at its Firstside Building. It serves newborns free for eight weeks, and serves as a backup to employees’ day-care arrangements.

Entry- and mid-level positions in hospitality and tourism are expected to pick up when the new convention center, hotels, and restaurants open in 2003-2004. Industry-cluster chair Joe Kane of the Westin Convention Center hotel says that retraining current employees will be a focus.

“We need people to move up through ranks, ready to take over supervisory positions,” he says. To supply young talent, he points to programs like the Urban League’s hospitality-management institute, which trains 15 to 20 people in six-to eight-week sessions. Johnson Martin of the Pittsburgh Public Schools says he’d like to see a

culinary-skills program in the new career-development initiative to take advantage of demand in new restaurants and hotels.

Kane knows that the image of the region emanates from hospitality front-liners, from desk clerks to cabbies. That's why his cluster undertook a \$10,000 cabbie-training program, funded through Workforce Connections, to make them think of themselves as ambassadors, rather than hacks. "We teach hospitality: how to emphasize the good points of the city. It's simple. Hospitality and tourism surrounds the other industries. They go hand in hand.

Manufacturing

With a proud regional history in manufacturing, it's not surprising that development of the manufacturing workforce has led the other clusters. One of the first grassroots efforts to improve local workers' skills came as far back as 1993, when Barry Maciak, then with Duquesne's business school, began organizing manufacturing networks for manufacturing managers in the inner city and the Mon Valley.

"Workforce was always at the forefront of maintaining skills to stay competitive," he recalls. "But around '96 to '97, we started to hear a different story. The priority was still to grow and expand skills – but they were having trouble finding good entry-level skills. We started working with companies to develop training for current workers."

From that base, Manufacturing 2001 – now expanded and directed by New Century Careers, a project of the Institute for Economic Transformation at Duquesne University – has expanded to free work – and community-based programs for adults throughout the region, like Kennametal University in Latrobe. "We've graduated over 500 individuals. We have 125 companies involved," says Maciak. "Our placement rates over history have been 70 to 80 percent." Though he concedes the recession has slowed demand, he's optimistic. As the economy picks up, he's optimistic: "Demand will be coming right back – and the most skilled workers are last to be laid off."

While giants like the Sony Corporation of America require huge numbers of workers, 42 percent of all manufacturing employment is in small to mid-sized firms, employing 20 to 250 people, notes Maciak.

"People are surprised that there are still good, well-paying jobs in manufacturing – and there's a big window of opportunity to connect local residents to jobs," he says. "Sixty percent of our graduates are from distressed communities." Those communities are home to nearly half of all jobs in metal, machinery, and equipment firms – meaning that a trained worker is likely to have career opportunities close at hand.

"In the past neighborhood groups tried to put people in jobs without proper training. Companies would hire 10, then keep two – an expensive way to screen. We do the

skills prep and training, so we take the risk out of hiring. We are working in the same communities, but we are doing it in systematic ways,” he explains.

The Pittsburgh Technology Council has addressed future manufacturing workforce needs through an ambitious year-round program for high schoolers. The overall goal: to send young minds the message that manufacturing can provide a lifetime of challenging, well-paid work.

“The manufacturing-pathways initiative, piloted in Westmoreland County, is now going to the other eight counties in the region,” explains Joan Bercik, PTC’s vice president for workforce education. “It starts as a summer program for high school sophomores, in groups of 20 to 25. They start with two weeks of class work around manufacturing, and then have paid four-week internships at companies linked to Westmoreland County Community College. “This spring, they’re working on real-life manufacturing problems in their high school classrooms.”

“We’re measuring success on different scales – the number of students, schools, businesses, and ultimately, the number of students in the manufacturing post-secondary program,” she notes.

The cluster concept has allowed industry groups to focus on their own needs. But Workforce Connection’s Mitchell says there’s more consensus needed.

“IT says: “We want CMU grads to stay. We want fast-growing businesses.” Others come from the traditional workforce side. They are concerned with the disadvantaged and dislocated people in the community; they don’t care about the CMU grads. And yet you need both to have a vibrant economy.

“People are just starting to understand what that means.”