College district works with companies to improve offerings

Agnel Philip, The Republic | azcentral.com   *8:26 a.m. MST June 1, 2015*

(Photo: Michael Chow/The Republic)

To help meet the demand for skilled employees in the area, the Maricopa County Community College District is allowing employers to help shape its curriculum.

The district uses advisory committees comprised of representatives from companies like Microsoft and Cisco Systems that may hire its graduates, said Randy Kimmens, the district's associate vice chancellor of workforce development.

Kimmens said the relationships with prospective employers allow the district to develop curriculum that more closely matches their needs.

"If we're not creating the right kinds of courses and course competencies, content and skills, it's a disservice to the students and to the employer," he said. "It's really critical that we stay on top of what employers needs are and adjust our curriculum accordingly to make certain students are getting the skills that they need."

One program that has successfully incorporated content is the polysomnographic technology associate degree program, where students learn to become sleep lab technologists. The 16-month program at Gateway Community College requires three clinical rotations, classes and other coursework.

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The program, which graduated its first class in 2010, was implemented because of a need for skilled sleep lab techs, said Wendi Nugent, sleep program director.

It has an advisory board made up of representatives from private and hospital sleep centers around metro Phoenix who have helped direct the curriculum so students learn the skills they need on the job, she said.

Board member Gerald Fougner, lab director for Valley Sleep Center, which has five metro Phoenix facilities, said the partnership between the board and program works well.

"We get students who are ready to work," Fougner said. "They know what to do."

Another program that had significant employer input is a health-care technology systems program, MCCCD spokesman Andrew Tucker said in an e-mail. The district has also switched manufacturing and architectural software programs and created four new architecture classes because of input from advisory committees, he said.

Getting input from companies that hire community college graduates is essential for community colleges to ensure their curriculum is adequately training students, said Joseph Fuller, senior lecturer at Harvard Business School and faculty member of the school's U.S. Competitiveness Project. He said companies also must take the initiative.

"Employers have to step up and accept that they have to play an ownership role in this," Fuller said.

Fuller helped write a report on the health of what he calls "middle skills" jobs, which are jobs that require more than a high school degree but less than a four-year bachelor's degree. Middle-skills industries include sales, heavy machinery, information technology and health care.

Although his research did not go into the state of middle-skills jobs in Arizona, Fuller said that nationally, community colleges are failing to train students to succeed in the workforce and companies are not investing in education like they should. The result is that the graduates of community colleges fail to meet the expectations of employers.

"You could argue that the market is as close to a non-functioning market or highly inefficient market as one would observe in economics," he said.

Improving education and access to middle-skills jobs is important because they often provide opportunities for financial security to those who cannot attend a four-year university, Fuller said. Jobs in sales and IT, for example, allow an employee to work his or her way up the ladder.

While there are fewer middle-skills jobs in the Phoenix area than the national average, there is plenty of demand among employers in certain industries, especially IT, said Matthew Sigelman, CEO of Burning Glass Technologies, a data analysis company that worked with Fuller on his report.

For example, he said IT help-desk jobs take 20 percent longer to fill in the Phoenix area than they do nationally, a trend he attributes to demand from employers.

In the Phoenix area, Burning Glass Technologies research shows, insurance underwriting and pipefitting jobs also are among those that take longer to fill than the national average because the supply of qualified individuals does not match up to the demand from employers.

"When you think about how you train workers for jobs, you really need to know those kinds of things because that's where you can identify where there are skill gaps where employers are struggling to fill jobs," Sigelman said.

Kimmens said MCCCD is constantly looking for ways to involve companies in the classroom to keep its curriculum up-to-date with industry trends.

However, keeping up with those trends is a difficult task because of budget cuts, including those in this year's state budget, which eliminates state funds to the district's schools.

The district has received donations from companies, as well as grants and other measures, to keep its equipment updated, Kimmens said. Furthermore, budget cuts will impact the college's ability to hire faculty who have relevant experience.

Fuller said that while funding for community colleges is important, the colleges need to do a better job of utilizing those funds.

"A lot the investment in skills development taken by community college ultimately is not terribly efficient because the spending is to develop curriculum or support enrollment that really isn't very well designed to end up putting the product of that school … into jobs that have a future," he said.

Listening better

Maricopa Community Colleges developed classes based on input from business professionals.

Among them:

- **Law enforcement classes.** Based on suggestions from an advisory board that included police officers, detectives, administrators and higher education faculty, the college district adapted its curriculum to address issues including oral report preparation, more report writing practice, more domestic violence practice and dispatcher basic training. The most recent course added was an elective course, Spanish for Law Enforcement, which is offered online through Glendale Community College.

- **Exercise science/personal training classes.** An advisory board, comprised of fitness leaders, non-profit organizations focused on exercise and wellness, said students needed to develop strong communication skills. As a result, the Fitness and Wellness department at Glendale Community College initiated more group activities, public speaking and presentation activities.
- **Computer-aided design technology.** The manufacturing advisory committee, made up of manufacturing employers, construction companies, higher education faculty and alumni, recommended switching from Inventor to Solidworks software in the mechanical classes. These classes will be offered in the fall at Glendale Community College.

Additionally, the architectural advisory board recommended to switching from AutoCAD to Revit and increasing related coursework offered. This led to the development of four new classes and the removal of four old classes.

- **Healthcare technology.** Based on employer interviews and research, MCC recently created a healthcare technology systems program to specifically address a need for skilled professionals in healthcare technology. The program, which starts this fall at Paradise Valley and Glendale community colleges, was built from ground level using employer suggestions.

Sources: Scott Schulz, dean of academic affairs, career and technical education at Glendale Community College, and Andrew Tucker, Maricopa County Community College District spokesman.

To help meet the demand for skilled employees in the Phoenix area, the Maricopa County Community College District is incorporating input from employers to keep its curriculum current. *(Photo: Mary Beth Faller)*

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