



### NEW IDEAS ABOUT NONTRADITIONAL

We have been visiting schools and looking for fresh ideas about attracting and retaining nontraditional students. We would love to continue this work, visit more schools, and talk to more teachers. If you are interested in sharing what you have done, please let us know.

### GET HELP FINDING DATA

It can be difficult to find the data you need for program planning, grant proposals, or other projects. Fortunately, you don't have to.

Virginia CTE professionals can contact Trailblazers any time for help with data needs. Don't waste time looking for information that we can help you find in five minutes. Just call, 434-982-5582.

### VACTEA 2011 ANNUAL CONFERENCE

The annual VACTEA meeting will be in Fredericksburg this year on October 5-7. I will be there to talk about employer partnerships, both in a regular session and at the advisory board meeting.

### COMPLETER FOLLOW-UP

The 2011 Follow-up of 2010 CTE completers has been concluded. Virginia exceeded the 75 percent response rate target, as did all but 12 school divisions or regional technical centers. CONGRATULATIONS! Survey results will be available in the November.

### TRAILBLAZERS BLOG

There is more to say about *Trailblazers'* topics than will fit in our newsletter, so we're writing a blog now. Take a look: <http://ctetrailblazers.blogspot.com/>



Learning that works  
for Virginia

## Employer Partners Help Open A New Program In Hanover

A new heating, ventilation, and air conditioning (HVAC) program will open up next fall at the Hanover Center for Trades and Technology; School Board approval just went through last week. While many people were involved in helping to make this program a reality, it would not have been possible without support from the community and partnerships with local employers. They helped to guide program planning and provide the financial support that the school needed to get this program off the ground. Their ongoing involvement should assure that HVAC students have jobs to step into when they graduate. *The Hanover Story*

[Hanover Center for Trades and Technology](#) is a three year old technical center with programs in automotive technology, building trades, cosmetology, culinary arts, industrial technology, and the space to add a program in one more trade. They have just received School Board approval to begin an HVAC program in the fall of 2012. Before approving the program, the Board carefully examined both the program's cost efficiency and potential job prospects for its graduates. Knowing that these were areas of prime concern, the Center spent over a year collaborating with employers and the community before submitting their proposal for the new program.

### *Getting the HVAC Program off the Ground*

Principal Vince D'Agostino, who came to the Center in 2010, began thinking about introducing HVAC after receiving calls from local employers who wondered if the school had an HVAC program. He always had to answer, "No." After a few such calls, he began to wonder "Why Not?" And he knew it was important when, talking it over with a local employer, he heard:

*"I really think you are on to something with the concept of putting an HVAC technical program in your Center. There are very few in the state and there is a great need and demand for the HVAC skill set. ... I believe we are CURRENTLY in a condition of shortage NOW. Our trade industry associations indicate that the shortage will become critical in the next three to five years."*

The idea of moving forward with the program got another boost last September when Mr. D'Agostino received a call from Margaret Hill of the [Hanover Education Foundation](#), whose mission is to develop and sustain education and business partnerships in the county. She reported that a grant opportunity was available from the [Greater Richmond Chamber Foundation](#) that might help launch a new program. When he called the Chamber Foundation, they weren't sure whether an application from the Center would qualify, explaining that they had never before awarded a grant to initiate a new course. Nonetheless the Chamber representative encouraged him to submit a proposal that included documentation of the local need for HVAC technicians.

In December 2010, the Hanover Education Foundation submitted a proposal to the Richmond Chamber Foundation for this amount on behalf of the Hanover Center for Trades and Technology. Months went by without a decision, but finally in February, the Chamber Foundation called to say the proposal was compelling and the Foundation would contribute \$10,000 to the new program provided that the Center could raise the balance of the funds elsewhere.

At this point, Mr. D'Agostino began to approach HVAC employers to look for their financial support. Trane responded that they could donate \$27,000 worth of equipment, more than enough to meet the Foundation's matching grant requirement. Once he

Occupational Employment Projections, Richmond Capitol Area				
Occupation	2008 Estimated Employment	2018 Projected Employment	Percent Change	Average Annual Job Openings
Heating, AC, & Refrigeration Mechanics	1,793	2,306	28.6%	80
Virginia Employment Commission, <a href="https://www.vawc.virginia.gov/">https://www.vawc.virginia.gov/</a>				

Then came the hard work of preparing a proposal and a budget. Mr. D'Agostino contacted us at [Trailblazers](#) to ask for the latest employment projections data on the regional need for HVAC technicians. The projections fully supported the conversations he had been having with local employers, showing that employment in this field was projected to continue growing over the next decade.

With data on employment need in hand, Mr. D'Agostino then began to prepare a budget, determining which existing equipment could be transferred to an HVAC shop and which equipment would have to be purchased. Research on equipment needs showed that a new HVAC program would need an additional \$24,000 worth of equipment, money which was not part of the Center's budget. The program could only go forward with outside help.

could assure the Chamber Foundation that matching funds were available, the grant was secure. The Center now had the funds to go ahead with a new HVAC program. Preparation for the program is now underway, and the Center plans to welcome the first class of HVAC students in September 2012.

*Continued Employer and Community Engagement*

Finding funding is just the beginning, not the end, of partner relations because to build a successful program the Center needs much more from employers than just their financial support. What they really need is employers' expertise, and commitment to student education and employment. Fundraising can get a program off the ground, but it takes long-term engagement to keep it going and make it a success. And the program doesn't only need support from

employers; it also needs the support and engagement of the school system and the wider community.

The Center began building this support by creating an HVAC Advisory Committee that includes a school board member, a high school principal, a school counselor, the CTE Coordinator, local HVAC employers, and even a retired HVAC technician to give the board depth and a sense of how the profession is changing. The intention behind the committee is to be as inclusive as possible. They don't want anyone to feel left out and say, "we didn't know you were doing this."

In addition to forming a committee and keeping them engaged in contributing ideas for the new program, it was important to search outside of the local area for ideas about how to build a successful HVAC program. Principal Vince D'Agostino, CTE Coordinator Dr. Cathy Glenn, and School Board member Earl Hunter visited existing programs in Spotsylvania and Newport News to find out how they are run and whether they have been successful in finding jobs for their students after graduation. They also visited a local HVAC company, James River Heating and Cooling, to get more ideas about what employers need in new employees.

As the Center begins the process of opening the new HVAC program, local employers, especially those on the advisory committee, have many important roles to play. The senior maintenance engineer from Brandywine Realty, a local property management company that is looking for more and better-trained young technicians, reviewed the equipment list to make sure that the Center is ordering the best equipment, at the right price, that is really needed to prepare up-to-date technicians. He also hopes to be able to donate extra equipment, freeing up some of the Chamber Foundation funds for other uses. Employers have also been asked to help with the redesign and layout of the new HVAC workshop and to participate in interviewing teaching candidates. Employers have also volunteered to send speakers and

participate in classes. They know what's cutting edge and will be able to help teachers to keep the curriculum as current as possible.

And if other programs at the Center are anything to go by, HVAC employers will soon be stepping up to offer students work experience, apprenticeships, and in the end, actual jobs after graduation. Mr. D'Agostino's says,

*"We have seen significant job opportunities for the courses we have. This summer I felt like I have been a job agency. I don't have enough students that I can place. We are not experiencing a lack of response. We are experiencing an overwhelming response from the community."*

His overall recommendation to others who are looking to build and expand employer partnerships, is that you have to reach out into the community to do this.

*"One of the things I have learned here is that you have to get out from behind your desk. You're not going to find a partnership if you're sitting behind your desk and doing paperwork. That's got to be done after hours because in work hours you're out trying to garner support."*

Now that HVAC is underway, his goal for 2012 is to have the school's automotive technology program NATEF certified. Preparing for that goal, he and his team made it a summer project to visit every single auto dealership in Hanover County. From those visits they not only learned more about preparing their program for certification, but developed new connections, partnerships, and most important of all, new job opportunities for their graduates.

## Adding A New Program? Consider Practical Nursing

Careers in health care offer good incomes and more stable job opportunities than those in almost any other field. Nursing, in particular, offers a reliable future. CTE students can get in on the ground floor of this career through our practical nursing programs. After qualifying as a licensed practical nurse (LPN), students can go straight to work or go on to study for higher level nursing careers. Many of Virginia's community colleges offer articulated programs to move licensed LPNs into registered nursing programs and the extended opportunities that this degree offers.

See Superintendent's Memo # 286-11 (October 2011) [Announcement of Incentive Grants for Implementation of "New" Practical Nursing Progra](#)

According to employment projections produced by the US Bureau of Labor Statistics, the number of jobs for [licensed practical nurses](#) is expected to keep growing. There are plenty of job openings now, and there are likely to be plenty of opportunities in the future as well. In 2010, LPNs had median annual earnings of \$37,700 in Virginia and \$40,400 nationwide. This is much more than the average for people with a high school diploma, just \$33,000.

In their [write-up of the nationwide outlook for this profession](#), the Bureau of Labor Statistics says:

*"Employment of LPNs is projected to grow much faster than average. Overall job prospects are expected to be very good, but job outlook varies by industry. The best job opportunities will occur in nursing care facilities and home healthcare services.*

*Employment change. Employment of LPNs is expected to grow by 21 percent between 2008 and 2018, much faster than the average for all occupations, in response to the long-term care needs of an increasing elderly population and the general increase in demand for healthcare services.*

*Demand for LPNs will be driven by the increase in the share of the older population. Older persons have an increased incidence of injury and illness, which will increase their demand for healthcare services. In addition, with better medical technology, people are living longer, increasing the demand for long-term healthcare. Job growth will occur over all healthcare settings but especially those that service the geriatric population like nursing care facilities, community care facilities, and home healthcare services.*

*In order to contain healthcare costs, many procedures once performed only in hospitals are being performed in physicians' offices and in outpatient care centers, largely because of advances in technology. As a result, the number of LPNs should increase faster in these facilities than in hospitals. Nevertheless, hospitals will continue to demand the services of LPNs and will remain one of the largest employers of these workers.*

*Job prospects. In addition to projected job growth, job openings will result from replacement needs, as many workers leave the occupation permanently. Very good job opportunities are expected. Rapid employment growth is projected in most healthcare industries, with the best job opportunities occurring in nursing care facilities and in home healthcare services. There is a perceived inadequacy of available healthcare in many rural areas, so LPNs willing to locate in rural areas should have good job prospects."*

The Bureau of Labor Statistics projections were made several years ago, and the current economic turmoil means that employment demand for many occupations is running far below what was predicted. It seems, however, that demand for LPNs continues, even though not at the pace we saw some years ago. [WantedAnalytics](#), a website that tracks employment demand and assesses how difficult it is to fill jobs, shows that over the past year there has been rising demand nationwide for LPNs, though not at the level it was four years ago.

You can get all the details about the Virginia CTE practical nursing courses from the [CTE Resource Center's Verso system](#).

For guidance in establishing a new CTE practical nursing program in Virginia, please contact staff in the Office of Career and Technical Education Services at [CTE@doe.virginia.gov](mailto:CTE@doe.virginia.gov) or (804) 225-2051.

## Student Debt At Virginia's Four-Year Colleges And Universities

Virginia's four-year public colleges have an average annual cost in tuition and fees of \$8,830, according to [Virginia Wizard](#). Private four-year colleges cost at least twice that much, and two-year colleges about half that amount. Most students borrow a significant amount of money in order to pay for college. And while college debt may be "good debt," because it brings a real lifetime benefit to those who graduate, it's still better to keep each student's amount of debt as low as possible.

CTE programs can help Virginia's students keep down college debt by:

- providing dual enrollment courses so students earn college credit in high school;
- preparing them with education and certifications that will help them earn more money in part-time jobs while they go to college; and by
- preparing them for technical jobs that pay the best possible wages for workers without a bachelor's degree.

A great website called [The Project on Student Debt](#) tracks the amount of debt that America's four-year college students are racking up state by state. Here are some of their statistics for Virginia.

### All Virginia Graduates

Average debt 2009 \$19,918  
Proportion w/debt 2009 57%

### Public 4-Year Institutions

#### Christopher Newport University

Average debt 2009 \$18,285  
Proportion w/debt 2009 55%  
Full-time enrollment fall 2008 4,584

2008-09 In-state tuition/fees \$7,550  
**College of William and Mary**  
Average debt 2009 \$18,410  
Proportion w/debt 2009 40%  
Full-time enrollment fall 2008 5,776  
2008-09 In-state tuition/fees \$10,246

#### George Mason University

Average debt 2009 \$19,528  
Proportion w/debt 2009 52%  
Full-time enrollment fall 2008 14,192  
2008-09 In-state tuition/fees \$7,512

#### James Madison University

Average debt 2009 \$18,183  
Proportion w/debt 2009 51%  
Full-time enrollment fall 2008 16,205  
2008-09 In-state tuition/fees \$6,964

#### Longwood University

Average debt 2009 \$20,855  
Proportion w/debt 2009 62%  
Full-time enrollment fall 2008 3,838  
2008-09 In-state tuition/fees \$8,499

#### Norfolk State University

Average debt 2009 19,371  
Proportion w/debt 2009 80%  
Full-time enrollment fall 2008 4,712  
2008-09 In-state tuition/fees \$5,560

#### Old Dominion University

Average debt 2009 \$17,250  
Proportion w/debt 2009 81%  
Full-time enrollment fall 2008 12,810  
2008-09 In-state tuition and fees \$5,574

#### Radford University

Average debt 2009 \$18,817  
Proportion w/debt 2009 59%  
Full-time enrollment fall 2008 7,779  
2008-09 In-state tuition/fees \$6,536

#### The University of Va College at Wise

Average debt 2009 \$12,120  
Proportion w/debt 2009 58%  
Full-time enrollment fall 2008 1,451  
2008-09 In-state tuition/fees \$6,429

#### University of Mary Washington

Average debt 2009 \$16,000  
Proportion w/debt 2009 57%  
Full-time enrollment fall 2008 3,602  
2008-09 In-state tuition/fees \$6,774

#### University of Virginia-Main Campus

Average debt 2009 \$19,939  
Proportion w/debt 2009 34%  
Full-time enrollment fall 2008 14,427  
2008-09 In-state tuition/fees \$9,300

#### Virginia Commonwealth University

Average debt 2009 \$22,864  
Proportion w/debt 2009 61%  
Full-time enrollment fall 2008 18,272  
2008-09 In-state tuition/fees \$6,779

**Virginia Military Institute**

Average debt 2009	\$19,046
Proportion w/debt 2009	34%
Full-time enrollment fall 2008	1,428
2008-09 In-state tuition/fees	\$10,556

**Virginia Tech**

Average debt 2009	\$22,070
Proportion w/debt 2009	52%
Full-time enrollment fall 2008	23,077
2008-09 In-state tuition/fees	\$8,198

**Virginia State University**

Full-time enrollment fall 2008	4,139
2008-09 In-state tuition/fees	\$5,903

**Private Non-Profit 4-Year Institutions****Averett University**

Average debt 2009	\$30,943
Proportion w/debt 2009	67%
Full-time enrollment fall 2008	753

**Bluefield College**

Average debt 2009	\$16,403
Proportion w/debt 2009	84%
Full-time enrollment fall 2008	594
2008-09 In-state tuition/fees	\$15,640

**Bridgewater College**

Average debt 2009	\$29,331
Proportion w/debt 2009	74%
Full-time enrollment fall 2008	1,497
2008-09 In-state tuition/fees	\$23,090

**Eastern Mennonite University**

Full-time enrollment fall 2008	940
2008-09 In-state tuition/fees	\$23,280

**Emory and Henry College**

Average debt 2009	\$19,168
Proportion w/debt 2009	65%
Full-time enrollment fall 2008	911
2008-09 In-state tuition/fees	\$23,860

**Ferrum College**

Average debt 2009	\$29,040
Proportion w/debt 2009	82%
Full-time enrollment fall 2008	1,373
2008-09 In-state tuition/fees	\$22,545

**Hampden-Sydney College**

Average debt 2009	\$23,822
Proportion w/debt 2009	54%
Full-time enrollment fall 2008	1,120
2008-09 In-state tuition/fees	\$29,801

**Hampton University**

Average debt 2009	\$4,783
Proportion w/debt 2009	85%
Full-time enrollment fall 2008	4,449
2008-09 In-state tuition/fees	\$16,392

**Hollins University**

Average debt 2009	\$24,002
Proportion w/debt 2009	63%
Full-time enrollment fall 2008	756
2008-09 In-state tuition/fees	\$27,055

**Jefferson College of Health Sciences**

Average debt 2009	\$17,327
Proportion w/debt 2009	43%
Full-time enrollment fall 2008	616
2008-09 In-state tuition/fees	\$16,275

**Liberty University**

Full-time enrollment fall 2008	14,704
2008-09 In-state tuition/fees	\$16,434

**Lynchburg College**

Average debt 2009	\$30,954
Proportion w/debt 2009	67%
Full-time enrollment fall 2008	2,016
2008-09 In-state tuition/fees	\$28,105

**Mary Baldwin College**

Average debt 2009	\$25,665
Proportion w/debt 2009	73%
Full-time enrollment fall 2008	1,072
2008-09 In-state tuition/fees	\$23,645

**Marymount University**

Average debt 2009	\$22,946
Proportion w/debt 2009	76%
Full-time enrollment fall 2008	1,872
2008-09 In-state tuition/fees	\$21,528

**Randolph College**

Average debt 2009	\$26,395
Proportion w/debt 2009	78%
Full-time enrollment fall 2008	548
2008-09 In-state tuition/fees	\$27,380

**Randolph-Macon College**

Average debt 2009	\$26,763
Proportion w/debt 2009	72%
Full-time enrollment fall 2008	1,176
2008-09 In-state tuition/fees	\$28,355

**Roanoke College**

Average debt 2009	\$25,932
Proportion w/debt 2009	66%
Full-time enrollment fall 2008	1,927
2008-09 In-state tuition/fees	\$27,935

**Saint Pauls College**

Average debt 2009	\$21,917
Proportion w/debt 2009	19%
Full-time enrollment fall 2008	623
2008-09 In-state tuition/fees	\$12,545

**Shenandoah University**

Average debt 2009	\$20,000
Proportion w/debt 2009	85%
Full-time enrollment fall 2008	1,588
2008-09 In-state tuition/fees	\$23,040
2008-09 Pell Grant recipients	21%

**Southern Virginia University**

Full-time enrollment fall 2008	648
2008-09 In-state tuition/fees	\$16,500

**Sweet Briar College**

Full-time enrollment fall 2008	767
2008-09 In-state tuition/fees	\$26,995

**University of Richmond**

Average debt 2009	\$21,555
Proportion w/debt 2009	42%
Full-time enrollment fall 2008	2,898
2008-09 In-state tuition/fees	\$38,850

**Virginia Intermont College**

Average debt 2009	\$16,337
Proportion w/debt 2009	76%
Full-time enrollment fall 2008	438
2008-09 In-state tuition/fees	\$23,210

**Virginia Union University**

Full-time enrollment fall 2008	1,089
2008-09 In-state tuition/fees	\$13,662

**Virginia University of Lynchburg**

Average debt 2009	\$9,500
Proportion w/debt 2009	90%
Full-time enrollment fall 2008	57
2008-09 In-state tuition/fees	\$4,300

**Virginia Wesleyan College**

Average debt 2009	\$27,658
Proportion w/debt 2009	80%
Full-time enrollment fall 2008	1,157
2008-09 In-state tuition/fees	\$26,438

**Washington and Lee University**

Average debt 2009	\$23,615
Proportion w/debt 2009	31%
Full-time enrollment fall 2008	1,749
2008-09 In-state tuition/fees	\$37,412

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