

Virginia Career and Technical Education: Program Highlights 2010-11

Virginia Department of Education, Office of Career and Technical Education Services



February 2, 2012

The 16 career clusters help students investigate careers and design their plan of study to advance their career goals. Within each career cluster, there are multiple career pathways that represent a common set of skills and knowledge, including academic, technical, and career readiness skills that lead to credentials necessary to pursue a full range of career opportunities from entry level to management, including technical and professional career specialties. CTE actively partners with business and industry to design and provide high quality, dynamic programs to meet current, emerging, and projected labor market needs. Relevant work-based learning opportunities and leadership development offered through career and technical student organizations, are incorporated into the academic and career plan.

2010-11 Student Enrollment by Career Clusters

Agriculture, Food and Natural Resources	11,597
Architecture and Construction	9,817
Arts, Audio-Video Technology and Communications	10,491
Business Management and Administration	45,168
Education and Training	8,877
Finance	5,627
Government and Public Administration	11,291
Health Science	6,968
Hospitality and Tourism	16,880
Human Services	34,094
Information Technology	30,775
Law, Public Safety, Corrections and Security	3,621
Manufacturing	3,682
Marketing	18,910
Science, Technology, Engineering, & Mathematics (STEM) ..	37,361
Transportation, Distribution and Logistics	7,426

TOTAL Number of Students Enrolled
(unduplicated counts)**262,585**

Source: Virginia Department of Education

Implementing "Rigor and Relevancy" in CTE Programs

- There are 10 Governor's Science, Technology, Engineering, and Mathematics (STEM) Academies across the Commonwealth (Halifax, Hampton, Arlington, Suffolk, Russell, Stafford, Loudoun, Chesterfield, Richmond City, Carroll). The goal is to add at least eight academies by 2013. The Governor's STEM Academies are designed to expand options for students to acquire STEM literacy, and other critical skills, knowledge, and credentials that will prepare them for postsecondary education and for high-skill high-demand, and high-wage careers in Virginia.
- In 2011-12, beginning with students entering the ninth grade, Virginia high school students must earn a credit in economics and personal finance toward graduation requirements. During the first semester, 9,256 students were enrolled in the (Business) Economics and Personal Finance Course and 1,087 students were enrolled in the semester Finance course.
- Beginning September 2011, Virginia's Microsoft Information Technology (IT) Academy Program was announced by Governor Robert McDonnell. This program provides a solution for bridging education and the world of work. It is designed to drive employability, digital literacy, STEM-focused training and certification, and 21st century workforce development for students.

Currently, all 360 high schools plus 10 regional technical centers are registered as IT Academies and

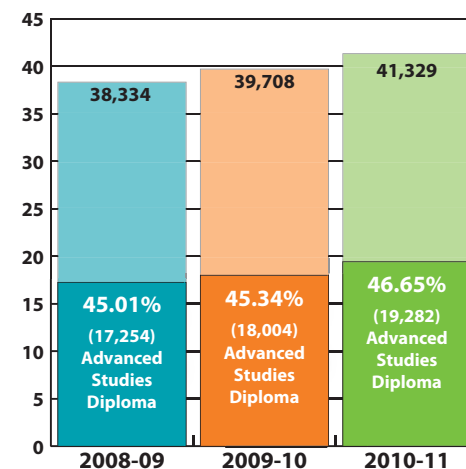
- 121 pilot sites and early adopters have been identified;
- alignment of 32 CTE courses with the IT Academy Program is underway;
- 664 teachers and administrators have been trained;
- 123 teachers have accessed the e-Learning IT courses;
- 414 IT Academy members have joined the Virginia Partners in Learning Share Site; and
- 42 teachers have been identified for the Virginia IT Academy Train-the-Trainer Program.

Full implementation statewide of the IT Academy is expected by 2013-14.

Improving Student Performance

- CTE Students' Baseline Performance on the *Workplace Readiness Skills for the Commonwealth Examination*
 - 2,400 of 3,693 (65%) students passed
 - 75.41 Mean Score
 - 78.00 Median Score
 - 197 students earned 81 out of a maximum score of 100
- 201 of 208 (97%) CTE secondary students earned the Virginia Career Readiness Certificate and/or the National Career Readiness Certificate.
- 3,198 of 4,004 (80%) CTE students passed the WISE (Working in Support of Education) test and earned the financial literacy credential.
- 119 of 133 school divisions and 8 of 10 regional technical centers reported CTE students enrolled in dual credit courses during 2010-11.

CTE Program Completers Graduated with Advanced Studies Diploma



Source: Virginia Department of Education

Virginia Career and Technical Education: Program Highlights 2010-11 *continued*

Virginia Department of Education, Office of Career and Technical Education Services



CTE Students Earned a Variety of Industry Certifications Across the Career Clusters

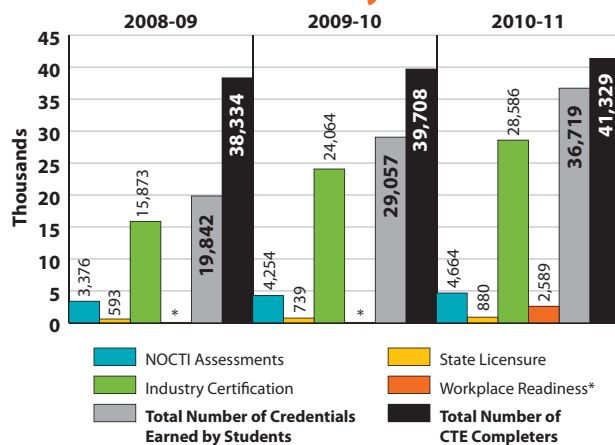
Region 1	Central Virginia	163
Region 2	Tidewater	155
Region 3	Northern Neck	98
Region 4	Northern Virginia	155
Region 5	Valley	122
Region 6	Western Virginia	113
Region 7	Southwest	134
Region 8	Southside	51

Source: Virginia Department of Education

Credentials Boost Resumes

With credentials in hand, students show their knowledge, technical and job-readiness skills, and stand out in today's competitive job market.

Credentials Earned by CTE Students



*Prior to 2010-11, workplace readiness skills assessments were included in the Industry Certification category, but are now reported separately.

Source: Virginia's School Report Card

Top Statewide Occupational Projections

Occupation	2010 Median Wage Virginia Statewide	2018 Projected Employment	Typical Education Needed for Entry
Registered Nurses	\$62,620	74,765	Associate's degree
Customer Service Representatives	\$30,740	68,708	High school diploma or equivalent
Accountants and Auditors	\$65,600	50,154	Bachelor's degree
Nursing Aides, Orderlies, and Attendants	\$23,160	45,056	Postsecondary non-degree award
Security Guards	\$25,580	36,426	High school diploma or equivalent
Executive Secretaries and Administrative Assistants	\$44,880	32,908	High school diploma or equivalent
First-Line Supervisors/Managers of Food Preparation and Service	\$30,840	27,059	High school diploma or equivalent
Licensed Practical and Licensed Vocational Nurses	\$37,710	25,787	Postsecondary non-degree award
Electricians	\$43,770	24,771	High school diploma or equivalent
Automotive Service Technicians and Mechanics	\$38,760	24,071	High school diploma or equivalent
Construction Managers	\$83,690	19,932	Associate's degree
Police and Sheriff's Patrol Officers	\$47,780	19,435	High school diploma or equivalent
Plumbers, Pipefitters, and Steamfitters	\$41,840	19,210	High school diploma or equivalent
Purchasing Agents, Except Wholesale, Retail, and Farm Produce	\$64,340	16,626	High school diploma or equivalent
Computer and Information Systems Managers	\$132,990	16,179	Bachelor's degree
Heating, Air Conditioning, and Refrigeration Mechanics	\$41,130	15,692	Postsecondary non-degree award
First-Line Supervisors/Managers of Non-Retail Sales Workers	\$75,380	14,029	High school diploma or equivalent
Financial Managers	\$114,130	13,928	Bachelor's degree
First-Line Supervisors/Managers of Mechanics, Installers	\$60,180	13,918	High school diploma or equivalent
Medical Assistants	\$28,820	13,128	High school diploma or equivalent
Dental Assistants	\$33,740	10,381	Postsecondary non-degree award
Fire Fighters	\$46,120	10,312	Postsecondary non-degree award
Child, Family, and School Social Workers	\$41,900	10,217	Bachelor's degree
Graphic Designers	\$47,240	9,223	Bachelor's degree
Paralegals and Legal Assistants	\$45,660	9,191	Associate's degree
Pharmacists	\$116,160	9,062	Doctoral or professional degree
Electrical Engineers	\$86,260	8,980	Bachelor's degree
Food Service Managers	\$52,120	6,662	High school diploma or equivalent
Medical Records and Health Information Technicians	\$32,390	4,277	Postsecondary non-degree award
Career & Technical Education Teachers, Secondary School	\$59,310	3,637	Bachelor's degree
Telecommunications Equipment Installers and Repairers	\$55,600	3,636	Postsecondary non-degree award
Civil Engineering Technicians	\$47,600	3,580	Associate's degree
Technical Writers	\$72,560	3,280	Bachelor's degree
Occupational Therapists	\$79,160	3,033	Master's degree
Environmental Engineers	\$79,230	2,781	Bachelor's degree
Respiratory Therapists	\$55,300	2,779	Associate's degree
Occupational Health and Safety Specialists	\$59,310	2,585	Bachelor's degree
Interior Designers	\$46,740	2,324	Bachelor's degree
Physical Therapist Assistants	\$50,300	2,219	Associate's degree
Veterinary Technologists and Technicians	\$33,240	2,047	Associate's degree
Dietitians and Nutritionists	\$51,690	1,459	Bachelor's degree
Air Traffic Controllers	\$141,760	1,317	Associate's degree

Source: Virginia Employment Commission, Virginia Occupational Employment Projections 2008-18