

CTE Monthly

May 2014

CTE Quick Facts

Did you know?

► 80 percent of students taking a college preparatory academic curriculum with rigorous CTE met college and career readiness goals, compared to only 63 percent of students taking the same academic core who did not experience rigorous CTE.ⁱ

► The dropout rate for comprehensive high schools in Massachusetts was 2.8 percent in 2011, compared to a dropout rate of 1.6 percent for Massachusetts vocational technical schools, on average, and 0.9 percent for regional vocational technical schools.ⁱⁱ

CTE: The Key to Economic Development in Information Technology

ACTE's newest [Sector Sheet](#) examines CTE's role in developing talent in information technology. It joins our previous [Sector Sheets](#), which examined CTE's role in growing the qualified workforce in health care, advanced manufacturing and energy.

The IT Sector Sheet explores projections for the information technology workforce, which is expected to increase by 18 percent through 2022. It also describes how CTE prepares high school, postsecondary and adult students for IT careers through a variety of courses in the Information Technology Career Cluster®, as well as other clusters and pathways; through work-based learning experiences such as internships and job shadowing; through career and technical student organization activities and competitions; and through earning stackable certificates and degrees, as well as industry-recognized certifications.

Learn more at www.acteonline.org/factsheets.

Career Spotlight



The Agriculture, Food and Natural Resources Career Cluster® has evolved dramatically over the past several decades, becoming more efficient and productive while reducing its need for a large, low-skilled workforce. Technological changes have led to little forecasted growth in employment within this cluster between 2008 and 2018, even though agricultural output is expected to grow consistently over that same period.ⁱⁱⁱ Nevertheless, this Career Cluster represents a broad range of professions with many individual occupations expected to grow at a much more substantial rate over the next decade.

As with most other Career Clusters, many occupations within Agriculture, Food and Natural Resources increasingly require education and training beyond high school. By 2018, 44 percent of all jobs in this area will require at least some form of postsecondary education or training.^{iv} When broken down by specific professions, this trend is understandable. For instance, job growth for nonfarm animal caretakers, such as veterinarians and related positions, is expected to increase by 20 percent by 2018. Employment opportunities for cartographers and photogrammetrists are expected to increase by an impressive 27 percent during that same time.^v Clearly the largest source of growth within this dynamic Career Cluster are those occupations with higher educational and skills demands.

The [Animal and Botanical Sciences Academy at Freehold Township High School](#) in New Jersey offers a host of programs of study that lay the groundwork for students to enter into many of the professions most in-demand within Agriculture, Food and Natural Resources. The academy offers four-year programs in areas such as plant and animal science, greenhouse production, food science and natural resources management. The program boasts a strong relationship with the national organization for agriculture education, FFA, through which students have the opportunity to explore various careers in the industry, develop leadership skills and participate in community service activities. Freehold's academy also has an articulation agreement with a local community college where students can earn up to nine postsecondary credits in introductory horticulture coursework. The academy has an impressive relationship with Wegman's Food Markets, and the company recently partnered with the school on a project related to sustainable greenhouse facilities. Clearly, students who successfully complete an academy program will be ideally positioned for further postsecondary education and a rewarding career in this important Career Cluster.^{vi}

May 29: School Tour for Senate Staff

The Senate Career and Technical Education Caucus and ACTE have arranged a tour of Edison Academy for Senate staffers on **Thursday, May 29, 2014, from 9-11 am!** The visit will provide a unique opportunity to meet with school staff and students, tour the school's many CTE programs (including IT/Network Administration, Auto Technician and Collision, Hospitality and Tourism, Electrical Construction and Engineering, and more), and attend a panel discussion with teachers, administrators, representatives of local business and industry, and postsecondary education partners. The school is located at 5801 Franconia Rd., Alexandria, VA 22310, just a few minutes from Capitol Hill (approximately one mile from the Van Dorn Metro Station). Parking passes will be arranged for those who drive to the campus. Please RSVP to [Karishma Merchant](#) in Sen. Tim Kaine's office, [Nicholas Butterfield](#) in Sen. Rob Portman's office or ACTE Legislative Liaison [Brendan Desetti](#).

ⁱ Southern Regional Education Board, High Schools That Work 2012 Assessment.

ⁱⁱ Fraser with Donovan, [Hands-On Achievement: Why Massachusetts Vocational Technical Schools Have Low Dropout Rates](#), Pioneer Institute Public Policy Research, 2013.

ⁱⁱⁱ Georgetown Center on Education and the Workforce, NRCCTE and NASDCTEc, [Career Clusters: Forecasting demand for high school through college jobs: 2008-2018](#), 2011.

^{iv} Ibid.

^v Ibid.

^{vi} Freehold Academy [website](#).

School Spotlight

Redmond High School

A comprehensive public high school on the north side of Redmond, Oregon, [Redmond High School](#) (RHS) prepares students for college and career readiness through programs in agriculture, veterinary medicine, animal/equine science, marketing, woodworks, construction manufacturing, business, floral design, computer integrated manufacturing, automotive and small gas engines.

Redmond High School was recently awarded a CTE Revitalization Grant from the state for \$474,955. Redmond Economic Development, Inc. (REDI) and local industry partners collaborated with the school to analyze the labor market in Redmond. Together, they determined that the greatest need is finding employees with training in manufacturing skills such as welding, 3D printing and fabrication. The grant funds will help Redmond High School's manufacturing technology program to offer more STEM and manufacturing classes to meet this need. In addition, RHS plans to increase collaboration with industry partners and offer work-ready certification for students.



Photo courtesy of Redmond High School.

The "Manufacturing the Future of Redmond" program will enable a student to graduate with a certificate in manufacturing proficiency, which guarantees that student an interview with a local industry partner. Students can also get on track to earn an associate degree in manufacturing from Central Oregon Community College within one year of graduation or potentially a bachelor's degree from the Oregon Institute of Technology within two or three years of graduation.^{vii}

Educator Spotlight



Jayne Greeney Schill, winner of the 2014 ACTE Career Guidance Award, sponsored by [Kuder Inc.](#), is CTE/Business Education Partnerships/College Bound Program (CBP) Coordinator-Counselor for St. Cloud Area School District #742 in Waite Park, Minnesota.

As the CBP coordinator, Schill has transformed the program into a model incorporating different career academies in which academics, career exploration and college preparation are linked to specific career fields. After Schill noticed a large gender gap in the academies, she developed and implemented the SciGals program at two middle schools

to promote STEM and digital media (DM) pathways for girls. In the past three years, 120 girls with an aptitude and an interest in STEM and DM have enrolled, enabling them to further pursue high-tech, high-demand and high-wage jobs in those areas.

In addition, each year, Schill organizes a College, Community and Career Readiness Conference for ninth-graders in which students can choose from and attend 20 breakout sessions about different careers and receive insights and life experiences from members of the St. Cloud Area Chamber of Commerce. According to Schill's superintendent, "She has brought a level of enthusiasm to both our staff and students regarding new course offerings and future career goals."

High School Grad Rate Climbs; CTE Concentrators Graduate at 93 Percent

The U.S. high school graduation rate has [risen to 80 percent](#), according to new data from the National Center for Education Statistics (NCES), while data from the Office of Career, Technical and Adult Education demonstrates a 93 percent graduation rate for CTE concentrators.

The Adjusted Cohort Graduation Rate (ACGR), according to NCES, was 79 percent for 2010-11 and 80 percent for 2011-12. The ACGR measures four-year, on-time graduation with a regular high school diploma. The dropout rate held steady at 3.3 percent for both years.^{viii}

Breaking down the data, female students graduated at a higher rate than male students—7 percentage points higher, both years. White and Asian/Pacific Islander students had graduation rates above the average, while African-American, Hispanic and American Indian/Alaska Native students, as well as economically disadvantaged students, students with limited English proficiency and students with disabilities, graduated at lower rates.

While the NCES report did not look at CTE concentrators specifically, their graduation rate is extremely high—in 2011-12, CTE concentrators graduated at a rate of 93 percent.^{ix}

vii Redmond School District, "[RHS Receives \\$474,955 CTE Revitalization Grant from ODE](#)," *Our Blog*, January 7, 2014; Leeds, "[New career and technical education programs: Bend-La Pine Schools and Redmond receive \\$700,000](#)," *The Bulletin*, January 9, 2014; additional information from RHS staff.

viii Statser and Stillwell, "[Public High School Four-year On-time Graduation Rates and Event Dropout Rates: School Years 2010-11 and 2011-12 - First Look](#)," National Center for Education Statistics, April 2014.

ix Haigh, Office of Career, Technical and Adult Education, presentation at the [2014 National Association for CTE Information conference](#), May 7, 2014.



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This newsletter is a collaborative publication of the Association for Career and Technical Education and the National Association of State Directors of Career Technical Education Consortium. It aims to keep Congress informed about CTE events, data, best practices and student success stories.