

## Enhance career and technical education

The Pennsylvania Department of Education (PDE) currently is implementing a five-year plan designed to revitalize Career and Technical Education (CTE) and comply with federal regulations. A key component of the new 21<sup>st</sup> Century program is a shift in focus from *training a student for a job to educating individuals for careers and lifelong mobility and advancement*. CTE focuses on a mix of career skills, academics and real-world application. The goal is to provide students with a full range of options, whether they choose working right after high school, going directly to college, or working followed by college at a later date. Whatever the choice, CTE students will be prepared.

### PSEA Recommendations

Support the positive strides made in the area of CTE by:

- Fully funding the state's share of Pennsylvania's Career and Technical Education according to the existing funding formula;
- Continuing implementation of the current Pennsylvania Department of Education five-year plan;
- Expanding articulation agreements with post-secondary institutions;
- Continuing to support and fund Science, Technology, Engineering, and Math (STEM) Initiatives;
- Continuing and expanding workforce partnerships;
- Continuing and expanding professional development initiatives;
- Allowing CTE students to take the National Occupational Competency Testing Institute (NOCTI) tests as part of an alternative pathway for graduation requirements; and
- Supporting PDE efforts to educate school districts on their mandated role in supporting special education students in career and technical education programs.

### Career and Technical Education in Pennsylvania

CTE has a long and rich history in the United States. Today's CTE has evolved from a limited number of vocational programs available at the conclusion of the 20th century into a broad 21st century workforce system that encompasses a variety of challenging fields in diverse subject areas that are constantly evolving due to the changing global economy.

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Today's CTE provides students:

- Academic subject matter taught with relevance to the real world;
- Employability skills, from job-related skills to workplace ethics;
- Career pathways that link secondary and postsecondary education;
- Second-chance education and training; and
- Education for additional training and degrees, especially related to workplace training, skills upgrades and career advancement.

Some facts about Pennsylvania CTE students:

- Students can attend one of 81 Area Vocational Technical Schools (AVTSS), also called Career and Technology Centers (CTC's) or Technical Schools. In addition, 15 AVTSS/CTCs offer comprehensive full-time programs where students receive both basic and career and technical education. There also are many CTE programs that are delivered in high schools, such as Business Education and Agriculture Education.
- According to 2006-2007 data from the U.S. Department of Education (the latest numbers publicly available), there are more than 200,000 CTE students in Pennsylvania.
- In 2006-2007, 5,418 CTE students earned Industry Approved Certifications.

**Funding is declining.** PSEA is very concerned that, in the last decade, the state subsidy for vocational education has dramatically declined. In the 2009-2010 school year, Pennsylvania CTE will receive a subsidy allocation that is 70 percent less than is needed to fully fund the vocational subsidy formula, resulting in districts receiving only a percentage of the funds necessary to run these programs. With each year of decline, the extra financial burden further constricts the state's ability to meet the needs of these students. Funding must start to increase, or CTE schools and programs will be faced with cutbacks in program offerings, materials, tools and supplies, which will have a devastating effect on classroom instruction.

PSEA supports expanding effective programs that focus on real-world needs such as those that:

- Combine at least two years of secondary education in a state-approved CTC with the equivalent of two years of postsecondary education (associates degree) or less (certificate program).
- Align with Pennsylvania Department of Labor and Industry-recognized high priority occupations that are in demand by employers, have higher skill needs, and are most likely to provide family sustaining wages (currently \$27,000 for two adults).<sup>1</sup>

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- Expand STEM (Science, Technology, Engineering and Math) Initiative opportunities. Pennsylvania and five other states (Colorado, Hawaii, Minnesota, Ohio, and Virginia) have joined forces with the National Girls Collaborative Project. The goal of this program is to increase opportunities for women, minorities and underdeveloped groups to enter career fields represented by STEM. It partners state agencies, businesses, secondary education and higher education to provide students with an opportunity to work with mentors in the business community on real-world problems.
- Include professional development for staff, such as:
  - The Career and Technical Distinguished School Leader Program, which uses retired educators and administrators as coaches to provide targeted assistance to the Career and Technical Centers to improve student achievement on the 11<sup>th</sup> grade PSSA math/reading assessment and to improve student achievement on end-of-course occupational assessments.
  - Training to meet needs of special student populations. PDE estimates that 30 percent of CTE students have IEPs or are from low-income families. A recent change to Chapter 49 – Teacher Certification regulations of the State Board of Education will require all CTE teacher certification programs to include three credits focused on diverse/English language learners and six credits focused on special needs instruction.
  - Technical Centers That Work (TCTW) – this program is based on a product of the Southern Regional Education Board (SREB) High Schools That Work. A program that has been in existence since 1987, this model is based on 10 research-based practices that are proven effective.
  - MAX (Motivation, Acquisition and eXtension) Teaching with Reading and Writing – like TCTW, this is not a new program. With this process, the teacher facilitates the learning with students being active, rather than passive participants in the classroom. The students read, think, discuss, and write about the content reinforcing their learning as the teacher guides them through the process.

## **Some CTE students need alternative pathways to graduation**

While all of Pennsylvania's students have been taking part in the PSSA assessments as required in part by the Elementary and Secondary Education Act (ESEA), CTE students have also been required by The Carl D. Perkins Vocational and Technical Education Act to take a CTE occupational/skills assessment test. This test, originally contracted to the National Occupational Competency Testing Institute (NOCTI) is administered to students who are soon to complete their individual CTE program curriculum. The test is a combination of written and practical

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(hands on) assessments. The purpose of the test is to evaluate students' levels of competency in their areas of study (such as electrical and drafting).



Now that Pennsylvania has adopted regulations to allow two routes for students to demonstrate educational competency – Keystone Exams or validated local assessments – PSEA believes that the NOCTI exam should be an additional route for CTE students. Most CTE students concentrate nearly 50 percent of their 10<sup>th</sup> to 12<sup>th</sup> grade instructional time in their chosen CTE curriculum. CTE's students' scores on their CTE skills assessments (NOCTI tests) demonstrate their readiness for the careers for which they have prepared. PSEA believes those NOCTI scores should be recognized as an appropriate pathway to graduation for CTE students. If the purpose of the Keystone Exams is to assist in gauging a student's readiness, then the NOCTI exams are the appropriate alternative pathway for CTE students.

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<sup>1</sup> Glasmeier, Dr. Amy K., and The Pennsylvania State University. (2009). "Poverty in America - Living Wage Calculator," retrieved December 2009, from <http://www.livingwage.geog.psu.edu/>.