

#### **CAREER & TECHNICAL EDUCATION (CTE)**

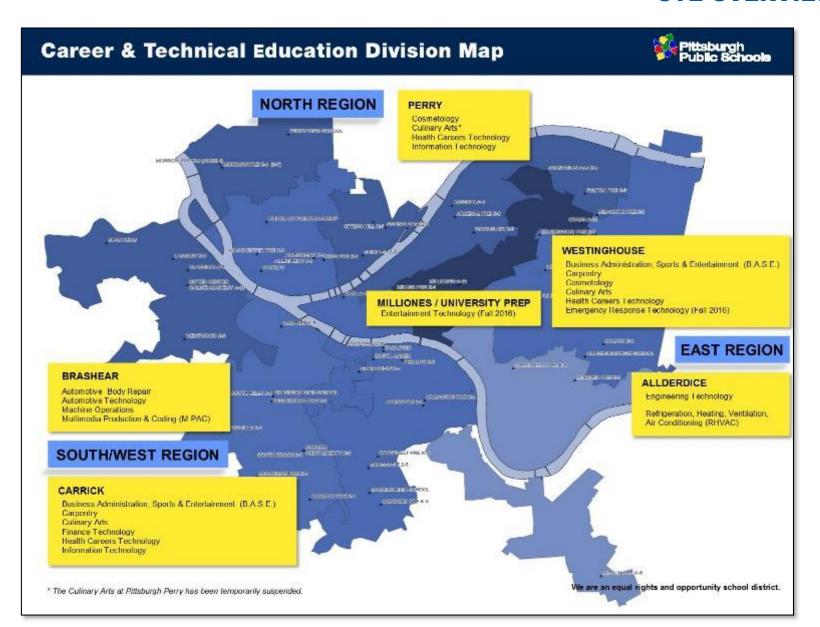


# **Education Committee Update**

809 Filthsoungh Public Schools



#### **CTE OVERVIEW**





# **PPS-CTE Programs of Study**

Per the Pennsylvania Code, career and technical education shall be made available to every student in the high school program (22 Pa Code § 4.23 (d)(1)).

- 15 Career and Technical Education programs of study in 6 high schools
- Approximately 500 CTE program students
- Starting in grade 10, programs are offered 3 periods/day, every day for 3 years
- 111 sharetime/travel students (use mid-day shuttles and bus passes)
- 21 students transferred into a different region to take a program not offered in their region



# **PPS-CTE Programs of Study**

- Upon completion of a CTE program:
  - Students can qualify for industry certifications
  - Students can qualify for articulated credits through S.O.A.R. (Students Occupationally and Academically Ready)
  - Students can earn a Pennsylvania Skills Certificate, signed by the governor
- All programs prepare students for entry-level employment and post-secondary education
- CTE students can earn dual-enrollment college credits in 3 programs (Culinary Arts, Health Careers, RHVAC)





### **CTE Exploratory Electives: Course Offerings**

CATEGORY	COURSES	TOTAL 2016-17 ENROLLMENT IN CTE ELECTIVES
BUSINESS/COMPUTERS	Business Economics Business Law Computer Fundamentals Computer Science Microsoft Office Applications Personal Finance Web Design	3,906
TECHNOLOGY EDUCATION	Applied Engineering Computer Aided Design (CAD)/Drafting Construction Introduction to Machining Introduction to Videography Mobile Apps/Gaming Pre-Engineering Technology Robotics Technical Theater Visual Communications	
FAMILY AND CONSUMER SCIENCE (FACS)	Child Development Fashion Arts Food and Nutrition Introduction to Culinary Arts Skills For Life Steps to Success	



#### **CTE ACCOMPLISHMENTS**

- Dramatic Increase in Industry Certifications Earned
  - In 2009-10, 42 industry certifications were earned by students.
  - In 2015-16, 482 industry certifications were earned by students.
- Significant Increase in Pass Rate for the NOCTI Exam (end of program assessment)
  - In 2009-10, 36% of students passed the NOCTI Exam
  - In 2015-16, 70% of students passed the NOCTI Exam
- Opened 4 new programs in 3 years:
  - Emergency Response Technology (E.R.T.) Westinghouse 2016-17
  - Entertainment Technology University Prep @ Milliones 2016-17
  - Multimedia Production and Coding (M-PAC) Brashear 2014-15
  - Carpentry Carrick and Westinghouse 2013-14
- PPS-CTE Students Consistently Win Medals in SkillsUSA Competition
  - 2015-16 2 first-place regional winners advanced to State; won 2<sup>nd</sup> place at State level
  - 2016-17 1 first-place regional winner advancing to State







# **PPS-CTE Partnerships**

- CTE has over 60 partnerships including:
  - The City of Pittsburgh
  - Greater Pittsburgh Automobile Dealers Association
  - Keystone Mountain Lakes Regional Council of Carpenters
  - Northwest Savings Bank
  - Pittsburgh Federation of Teachers
  - Point Park University
  - Steeltown Entertainment
  - Row House Cinema



### **Technology in CTE**

### Technology

- Updated software for programs and electives
- Implemented Online Curriculum for Auto Tech, Health
   Careers, Cosmetology, and Engineering programs
- Developed Electronic Career Portfolio for all CTE Seniors
- Implemented EverFi Financial Literacy Curriculum (online)
- Integration of technology into lessons (Kahoot, Quizlet, Socrative



# **CTE's State of the Art Equipment**

- 3D Printers and Laser Engraver in Engineering
- SawStop in Carpentry, Tech Theater
- ShopBot in Carpentry, Construction
- SimPad, Simulation Mannequins (Health Careers)
- Computerized Aligner (Automotive Technology)
- HVAC trainer (RHVAC)
- RealityWorks RealCare Dolls (in Child Development courses)









### **CTE Marketing**

- Launch of the CTE Virtual Tour
- Launch of CTE's On-Line Application
- Posting of CTE Billboards (<u>funded by the AFT</u> <u>Innovation Grant</u>)
- Launch of CTE Twitter and Facebook Accounts
- CTE Display Ads (funded by the AFT Innovation Grant)
   (seen in the Pittsburgh Post-Gazette, SoulPitt,
   Northside Chronicle, South Pittsburgh Reporter,
   Pittsburgh Courier)
- CTE College & Career Fair





#### **CTE ACCOMPLISHMENTS**

### Teacher/Staff Support

- Teacher PD sessions
  - Appy Hour iPad (app sharing)
  - Project-based learning (PD delivered by SREB)
  - NOCTI toolkit development
  - Student Learning Objectives (SLO)
  - Documenting learning experiences with digital cameras



### CTE Office Staff

- iPad Vanguard Training (certifications earned)
- CTE Staff invited to present at PDE's Integrated Learning Conference







#### Grant Awards

- Carl D. Perkins Grant
- American Federation of Teachers (AFT) Innovation
   Grant Award
  - Purpose: Marketing/ Awareness of CTE & Support ERT Launch
  - \$150,000 award (2 years, funding ends July 2017)
  - Covered Cost of Grant Project Manager (Darcy Tyhonas)
- PDE Supplemental Equipment Grant
- Partner 4 Work Grant





#### 2016 Perkins Audit Findings – Highlights

- NO CORRECTIVE ACTIONS!
- Rigorous, data-driven professional development is provided for CTE teachers, in-house.
- CTE integration teachers and career counselors are having a positive impact on student outcomes.
- CTE student outreach initiatives (the result of civic/community partnerships) were highlighted: tax preparation workshop, donation of blankets to nursing home, Toys for Tots drive, training of senior citizens how to use technology.
- CTE's EDGAR inventory tracking/labeling system was noted as best in the state.





Hosted Governor Tom Wolfe's visit to Brashear CTE Programs.









 Hosted Acting Secretary of Education, Dr. John King visit to Westinghouse for CTE program tour and Panel Presentation on the value of CTE.









#### **CTE EVENTS**

2016 CTE Commencement Celebration.









#### **CTE'S FUTURE GOALS: 2017 AND BEYOND**

- Offer a 3-day CTE Exploratory Summer Program for 9<sup>th</sup> grade June 2017 at Pittsburgh Westinghouse. (funded by the AFT Innovation Grant)
- Pilot CTE exploratory courses at Pittsburgh Langley for grades 6-8 in 2017-18.
- Increase non-traditional student participation in CTE programs.
- Convey the role of CTE in Meeting Regional Workforce Needs
- Increase the pool of qualified CTE teacher candidates
- Continue the Momentum of CTE Awareness/Marketing Initiatives
- Implement a District Wide News Show (Entertainment Technology)
- House Bill 202 alternative pathway for CTE students to demonstrate readiness for high school graduation with NOCTI Exam
- Convey the "New CTE" to Internal and External Stakeholders



#### **CTE'S FUTURE GOALS: 2017 AND BEYOND**

Utilize the Inflection Point Report's Findings on Pittsburgh's Future
 Workforce Needs in Developing New CTE Program Offerings

Key Occupational and Industry Clusters per Inflection Point Report	
Healthcare (fastest growing field)	
Information Technology	
Engineering, Science and Production Energy	
Construction/Energy	
Energy	
Retail	



