

CHARLES COUNTY PUBLIC SCHOOLS
CAREER AND TECHNOLOGY EDUCATION

Building the Future
Workforce

A LOOK INSIDE OUR SCHOOL SYSTEM

2017-2018

- 36 Schools
 - 21 Elementary Schools
 - 8 Middle Schools
 - 7 High Schools
 - 4 Educational Centers
- 26,900 students
- 3,644 employees; the largest employer in the county
- Our Students:
 - 54.8% African-American
 - 28.7% White
 - 7.7% Hispanic
 - 7% Multi-Racial
 - 3.2% Asian
 - 0.5% Native American
- Graduation Rate: 94.74%
 - State Average: 87.67%

CTE IN CCPS

- **28** High School Completer Programs
- **9** out of the **10** Career Clusters are represented:
 - Environmental, Agricultural and Natural Resources will be represented in 2019-2020; Apprenticeship Maryland in 2019-2020
- **10** Four-Year Programs include:
 - Construction Design and Management (CDM)
 - Graphic Communications
 - CISCO: IT Networking and Cyber
- **12** Three-Year Programs include:
 - Electrical Construction
 - Welding Technologies
 - Cosmetology
 - Culinary Arts
 - Teacher Academy of Maryland (TAM)
- **6** Two-Year Programs include:
 - Career Research and Development (CRD)
 - Maryland Fire and Rescue Institute (MFRI)
 - Interactive Media
 - Academy of Health Professions: Pharmacy Technician

DATA!

2017-2018

- Enrollment in CTE Courses: 3,824 students
- Completers: 847 out of 1,965 students (52%)
- Dual Completers: 66.58% of CTE completers
- More Jobs for Marylanders Act: CCPS is at 42% with the goal of 45% in 2020

ACCESS AND EQUITY IN CTE

- North Point High School (17 programs)
 - Application in 8th Grade
- Comprehensive High Schools (7 programs)
 - No Application Necessary for CTE
- Robert D. Stethem Educational Center (5 programs)
 - Application in 10th Grade
- Global CTE: Not by location, but by area of interest
- Focus Groups
- 8th Grade presentation
- School Counselor follow-up lesson
- Parent Nights at each Middle School
- Resources sent home to parents
- Every 8th student makes a plan!

OPPORTUNITIES AND PROJECT BASED LEARNING K-12

- Project Lead the Way: Launch
 - Computer Science and Engineering Modules: Kindergarten, 1st and 2nd grade classes
 - Collaborative Exploration
 - Teachers as facilitators
- K-12 Computer Science
 - PLTW Launch (K-2)
 - Computer Class in Elementary (K-5)
 - Middle School Computer Science (6-8)
 - Gateway to Technology - Middle School (6-8)
 - High School Computer Science Pathway (9-12)
 - College of Southern Maryland Transcribed Credit Agreement
- Engineering
 - PLTW Launch (K-2)
 - VEX Robotics Teams (3-12)
 - MESA (3-12)
 - Destination Imagination (2-12)
 - PLTW: Gateway to Technology (6-8)
 - PLTW: Pathway to Engineering (9-12)
 - University of Maryland Baltimore County Transcribed Credit Agreement
- Career Cruising starts in 3rd Grade; implemented through School Counselors
- ALL CTE PATHWAYS UTILIZE PROJECT BASED LEARNING

FUNDING

- Approximately \$215,000 a year from Carl D. Perkins Grant
- Approximately \$550,000 a year from local funds to support Career and Technology Education

COMMUNITY SUPPORT

- **Program Advisory Committees**
 - Meet 3 times a year for every program
 - Curriculum reviews
 - Supply resources
 - Identify instructional needs
 - Identify industry needs
 - Mentorships
 - Guest Speakers
 - Guest Judges
 - Student Interviews
 - Work-Based Learning Opportunities
- **Local Advisory Council**
 - Meet 3 times a year to oversee CTE as a whole
 - Marketing
 - Parents
 - Students
 - Workforce and Industry
 - Workforce Needs
 - Programs to be updated
 - Programs to be eliminated
 - Programs to be developed
 - Ways to support Program Advisory Committees

STUDENT OUTCOMES: WHY CHOOSE CTE?

- **Industry-Related Certifications**

- NATEF: Brakes, Engine Performance, Engine Repair, Electrical Systems, Automotive HVAC, Transmissions (Automotive)
- NCCER Core, NCCER Level I (HVAC, Carpentry, Electrical Construction)
- CFC Certification (HVAC)
- ADDA Apprenticeship (Drafting)
- Maryland Board of Nursing Certified Nursing Assistant (Academy of Health Professions)
- ParaPro (Teacher Academy of Maryland)
- National Board Cosmetologist (Cosmetology)
- American Welding Society: up to 12 certifications

- **Transcripted Credits and Articulation Agreements**

- Local and State agreements

- **Student Organizations**

- SkillsUSA, Future Business Leaders of America (FBLA), Educators Rising
- Leadership Opportunities
- Mentorship Opportunities
- Job Offers and Connections
- Direct Feedback from Industry

A CLOSER LOOK: AUTOMOTIVE TECHNOLOGY

- **Program Certification**

- Recertification every 5 years
- NATEF
- Program Advisory Council support

- **Teacher Certification**

- Teacher Credentials
- Industry Credentials

- **Student Certification**

- Possibly 8 Industry Certifications!
- Reimbursement if the student passes
- Active participants in SkillsUSA

- **Program Advisory Council**

- Automotive Career Exploration: Ford
- Snap-On Tools
- Local Dealerships
- Mentorships, Internships and Work-Based Learning, Advisory

A CLOSER LOOK: COMPUTER SCIENCE NEW PATHWAY SY 2017-2018

Step 1:

Program Advisory Committee

- College of Southern Maryland
- University of Maryland Baltimore County
- Local Workforce: Peaknet, OutsourcelT
- Indian Head Naval Surface Warfare Center
- CISCO!

Step 2:

Pathway Approval

- Introduction to Computer Programming
- AP Computer Science Principles
- AP Computer Science- A
- CISCO Networking Academy: Linux and Cyber Security

Step 3:

Concrete Connections to College, Career and Community

- 1st Course: Transcribed Credits
- 2nd Course: Transcribed Credit through College Board
- 3rd Course: Transcribed Credit through College Board
- 4th course: possible CCENT, Security +, Linux certifications through CISCO

Step 4:

Keep Current, Keep Updating, Keep Training