

BOARD OF EDUCATION OF HARFORD COUNTY

INFORMATIONAL REPORT

ANNUAL REPORT OF THE CITIZEN ADVISORY COUNCIL ON CAREER AND TECHNOLOGY EDUCATION

OCTOBER 27, 2014

Background Information:

The Harford County Citizen Advisory Council on Career and Technology Education (CTE), formerly the Harford County Citizen Advisory Council on Vocational - Technical Education, was created by an amendment to the Federal Vocational Education Act in 1976 to advise both the Board of Education of Harford County and the Board of Trustees of Harford Community College on matters pertaining to vocational and occupational education. The Advisory Council has been an integral part of every decision made to strengthen career and technology education for over three decades. The Advisory Council has:

- Played a significant role in the planning and construction of the Harford Technical High School (formerly Harford Vocational-Technical High School) and subsequent additions, including the William H. Amoss Performing Arts Center;
- Played an instrumental role in forming a strong articulation between the Harford County Public Schools (HCPS) and the Harford Community College;
- Worked collaboratively with the business community, the Susquehanna Workforce Network and the school community to establish partnerships that promote career and technology education;
- Supported the Futures11 conference for high school juniors who are planning postsecondary options;
- Played a role in the planning, implementation, and evaluation of Career and Technology Education programs; and
- Endorsed applications for Carl D. Perkins and other Career and Technology Education grants each year.

Discussion:

The Harford County Citizen Advisory Council on Career and Technology Education would like to present to the Board the following accomplishments within this past year, September 2013 through June 2014.

1. Advocacy for local set-aside funding for career and technology education.

Since the formerly restricted Career and Technology “Set-Aside” funds (State Categorical Grant) became unrestricted in 2002, the Council has been seeking the continual allocation of

local funding for Career and Technology Education programs. The FY 2014 Operating Budget approved by the Board included funding for equipment service contracts (\$10,028 on equipment like an engineering copier, printing press, and commercial foods equipment); hazardous waste removal (\$10,000 to Safety-Kleen for removal of paints and solvents at Harford Technical and North Harford High Schools); student transportation to Career and Technology Student Organization competitions (\$8,960 for over 200 students participating in regional and state competitions of Future Business Leaders of America (FBLA), Future Farmers of America (FFA), Distributive Education Clubs of America (DECA), and Skills USA) and clinical experience sites (\$7,000 for buses for Academy of Health Professions student trips to Upper Chesapeake Medical Center, Harford Memorial Hospital, and Lorien Nursing Home); CTE teacher attendance at Career and Technology Student Organization competitions and conferences (\$6,400 for costs associated with sending sponsors of 3 students to national Skills USA competitions and sending 5 teachers to professional development conferences); and materials and supplies (\$97,000 for consumable materials).

2. Development of a Five-Year CTE Program Improvement Plan.

Council members reviewed short- and long-term program upgrades, additions, and deletions needed to align to the model Maryland State Department of Education (MSDE) CTE Programs of Study and gathered data on selected CTE programs for strategic planning. Identification of these programmatic needs is vital in addressing the Board of Education's FY 2014 charge to the Council to "evaluate the adequacy of the Career and Technology Education programs being offered in all high schools in terms of meeting both student and workforce needs, particularly those related to internship/mentoring opportunities and investigate non-traditional funding sources to support CTE programs." Programs to be considered for future implementation include: Communication and Broadcast Technology, Electronics/Robotics/Pneumatics, Computer Science, Academy of Information Technology and Manufacturing/Logistics/Distribution. Current programs that are recommended for expansion include: Teacher Academy of Maryland, Pre-Engineering, and Biomedical Sciences. (See Attachment A for a chart of current CTE programs.)

3. Review and approval of the Harford County Public Schools application for the Carl D. Perkins Grant for fiscal year 2014-15.

Council members reviewed and approved this application prior to submission to MSDE. In August 2014, a total of \$283,524 was awarded to Harford County Public Schools for CTE equipment/materials upgrade and teacher professional development for the thirty-three approved CTE programs in the county.

4. Review and approval of the Harford County Public Schools application for eleven Reserve Grants for fiscal year 2014-15.

Council members reviewed and approved the applications prior to submission to MSDE. In August 2014, a total of \$128,233 was awarded to Harford County Public Schools for the implementation of the Project Lead the Way Pre-Engineering program at Aberdeen and C. Milton Wright High Schools, the Project Lead the Way Biomedical Sciences program at Bel Air and Havre de Grace High Schools, the Homeland Security and Emergency Preparedness

program at Joppatowne High School, the Academy of Health Professions program at Harford Technical High School and for professional development for teachers in the Teacher Academy of Maryland, Automotive Technologies, and Career Research and Development programs.

Council Recommendations:

Members of the Citizen Advisory Council would like to acknowledge the progress being made to improve the quality and quantity of career and technology education programs offered to students in Harford County Public Schools. They have been keenly aware of the national priority placed on Science, Technology, Engineering, and Mathematics (STEM) programs and county priorities related to local labor market demands during their discussions. They recommend to the Board the following actions to continue to strengthen career and technology education programs in Harford County and support the Harford County Strategic Plan.

1. Short-Term Goals (within 1-2 years):

- Solidify funding resources to implement the Project Lead the Way (PLTW) Middle School Pre-Engineering program, Gateway to Technology (GTT) in all middle schools.

Progress to date: Start-up funds to implement this program at Havre de Grace, Southampton, Edgewood, North Harford, and Bel Air Middle Schools have been provided through the Harford County Public Schools Operating and Capital Budgets; the Maryland Science, Technology, Engineering and Mathematics (STEM) Education Grant; and the Science Applications International Corporation (SAIC-now Leidos). This is a planning year for a sixth program site at Aberdeen Middle School. The remaining three middle schools will require more extensive funding to reinstate technology laboratories which were previously dismantled.

- In cooperation with the Office of Grants, Business and Community Partnerships, develop a process to validate partnerships which can increase mentoring and/or internship opportunities for students in CTE programs.

Progress to date: A HCPS Partnership Network Site has been developed to offer a place where school system needs and community partnership opportunities can be matched to maximize resources. Promotion of this site to both internal and external stakeholders is now vital to its success.

- Determine seat capacity based on facility utilization as a basis for determining the location of future magnet/signature programs. Consider magnet program facility, staffing, transportation, equipment, and supply needs during Operating Budget deliberations.

Progress to date: In order to consolidate resources and maximize facility usage, the location and content of each of the existing 33 approved CTE programs in the county are being reviewed through the collaborative efforts of the Citizen Advisory Council for Career and Technology Education, the Task Force to Study Vocational and Technical Education in Harford County, and the Harford Technical High School Program Evaluation Committee.

Board of Education Strategic Plan Objectives:

- 1.2 Provide the necessary support for low-performing students of diverse backgrounds.
- 1.3 Provide opportunities for students to earn college credits prior to high school graduation.
- 2.2 Provide ongoing opportunities and structures for two-way communication between the school system and the community.
- 2.3 Utilize multiple methods of communication in order to effectively reach stakeholders with pertinent information and provide the opportunity to engage with the school system.
- 4.1 Provide functional and efficient school buildings and support facilities.

2. Mid-Term Goals (within 3-5 years):

- Implement the state developed Computer Science program at Havre de Grace Middle/High School as a magnet program offered to students across the county.
Progress to date: This program has been approved by the Harford County Board of Education as part of the Havre de Grace Middle/High School Educational Specifications. This program will replace the current Computer Programming program offered at five sites.
- Implement the state developed Communication and Broadcast Technology program at high schools with communication studios including: Bel Air, Edgewood, North Harford, and Patterson Mill.
Progress to date: The Maryland State Department of Education has developed a draft program proposal but will not release it to Local Education Agencies until a postsecondary partner is confirmed.
- Develop and implement new CTE programs related to the Transportation, Logistics and Manufacturing industries to address the labor market needs of the Susquehanna Workforce Investment Area (SWIA).
Progress to date: The Maryland State Department of Education is researching the viability of developing a high school program of study in logistics/distribution with postsecondary connections to Morgan State University and the Community College of Baltimore County. Representatives from Harford County Public Schools will independently investigate the feasibility of a locally developed program.

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- 2.2 Provide ongoing opportunities and structures for two-way communication between the school system and the community.
- 4.1 Provide functional and efficient school buildings and support facilities.

3. Long-Term Goals (5-10 years):

- Increase the number of students accessing the Project Lead the Way Biomedical Sciences program by expanding the program to additional high schools should county funding become available.
Progress to date: The program is being implemented at Bel Air and Havre de Grace

High Schools with funding from the Maryland Science, Technology, Engineering and Mathematics (STEM) Education Grant; Carl D. Perkins Grant; CTE Reserve Grants; and Harford County Public Schools Operating and Capital Budgets to support teacher training and the purchase of equipment/materials.

- Increase the number of students accessing the Project Lead The Way Pre-Engineering program by expanding the program to additional high schools should county funding become available.

Progress to date: The program is being implemented at Aberdeen and C. Milton Wright High Schools with funding from the Carl D. Perkins Grant, CTE Reserve Grant, and Harford County Public Schools Operating and Capital Budgets to support teacher training and purchase of equipment/materials.

- Expand the quantity and quality of CTE programs offered to students (e.g., Academy of Information Technology or Electronics/ Robotics/Pneumatics).

Board of Education Strategic Plan Objectives:

- 1.1 Review and analyze available data to ascertain graduates' career and post-secondary educational success.
- 1.2 Provide the necessary support for low-performing students of diverse backgrounds.
- 1.3 Provide opportunities for students to earn college credits prior to high school graduation.
- 3.1 Increase student achievement by providing all Harford County Public Schools staff with the skills and content knowledge necessary.
- 3.3 Provide all staff with professional development, resources, and services.
- 3.4 Fill all staff vacancies in accordance with urgency and system needs.
- 4.1 Provide functional and efficient school buildings and support facilities.

The Citizen Advisory Council on Career and Technology Education recommends that the members of the Board of Education consider these recommendations as part of the Fiscal Year 2015-16 Operating Budget deliberations. The Committee proposes the following charge for the 2014-15 school year: evaluate the adequacy of the Career and Technology Education programs being offered in all high schools in terms of meeting both student and workforce needs, investigate non-traditional funding sources to support CTE programs, and continue to address the recommendations from the Maryland State Department of Education, Division of Career and College Readiness, monitoring site visit.

Harford County Career Completer Programs by Cluster Areas

	Alt Ed	AHS	BHS	CMW	EHS	FHS	HGHS	HTHS	JHS	NHHS	PMHS
1. Arts, Media, and Communication											
• Printing and Graphic Communications								X			
2. Business, Finance, and Information Technology											
• Academy of Finance					X						
• Accounting		X	X	X	X	X	X		X	X	X
• Administrative Services		X	X	X	X	X	X		X	X	X
• Business Management		X	X	X	X	X	X		X	X	X
• Cyber Security								X			
• Computer Programming		X		X		X			X	X	
• Marketing		X	X	X	X	X	X		X	X	X
3. Health and Human Services											
• Academy of Health Professions (Nursing Assistant)								X			
• Biomedical Sciences			X				X				
• Early Childhood Education		X	X	X	X	X	X		X	X	X
• Food and Beverage Management (ProStart)		X	X	X	X	X	X		X	X	X
• Food Production and Management								X			
• Health Occupations (Sports Technician and Exercise Science)								X			
• Homeland Security and Emergency Preparedness									X		
• Licensed Cosmetology								X			
• Teacher Academy of Maryland		X	X	X	X	✓	✓		✓	X	X
4. Science, Engineering, and Technology											
• Agriculture/Animal Science								X		X	
• Automotive Diagnostics and Systems Repair								X			
• Automotive Refinishing and Collision Repair								X			
• Brick and Block Masonry								X			
• Carpentry								X			
• Certified Welding								X			
• Computer-Aided Design and Drafting								X			
• Computer-Aided Machining and HPM								X			
• Computer and Networking Technology								X			
• Electricity								X			
• Heating, Air Conditioning and Refrigeration Technology								X			
• Horticulture/Floral Design								X		X	
• Natural Resources and Agricultural Sciences										X	
• Pre-Engineering		X		X							
5. Career Research and Development	X	X	X	X	X	X	X		X	X	X

- * Currently being developed for MSDE approval
- X Program is approved and being Implemented
- ✓ Future possibility