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**February 26, 2018**  
**Testimony**  
**House Appropriations Committee**

Dr. Stephanie Shanblatt, Chair, Pennsylvania Commission for Community Colleges and  
President, Bucks County Community College

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Pennsylvania's community colleges appreciate the opportunity to provide testimony to the House Appropriations Committee on the topic of pathways for students from high school to postsecondary education. The colleges recognize the importance of a well-skilled workforce to Pennsylvania's economic vitality and they are committed to ensuring that Pennsylvanians have access to affordable, high-quality postsecondary workforce training aligned with industry needs.

According to the Georgetown Center on Education and the Workforce, by 2020, 65 percent of all jobs in the economy will require postsecondary education and training beyond high school, and 30 percent of those jobs will require some college or an associate degree. The Commonwealth's community colleges are committed to working collaboratively with secondary and postsecondary education systems, along with business and industry, to ensure all Pennsylvanians have access to the vital training and education needed to fill these critical jobs.

Our community colleges have extensive experience in workforce development and career training programs. More than 317,000 students across all 67 counties were enrolled in one of our 14 community colleges in the last academic year. That makes community colleges the largest provider of public postsecondary education in the Commonwealth.

The colleges currently offer 1,354 credit programs, many of which are in Science, Technology, Engineering and Mathematics (STEM) fields, one of the nation's fastest-growing

occupational sectors, and identified as high-priority occupations by the state Department of Labor & Industry. In addition to credit programs, the colleges offer diploma and certificate options. The colleges regularly evaluate workforce needs and adjust program offerings to align with those needs. New programs are developed through a process that considers local labor market data, in-demand occupations, local employer need, and input of industry advisory councils. As part of these ongoing efforts, the colleges have strong partnerships with secondary schools, career and technical centers, businesses and other postsecondary education providers.

The success of these programs is compelling. (*Appendix A provides an overview of the types of programs offered by Pennsylvania's community colleges.*) Based on the experience of the colleges, the challenge rests in what needs to be done to support the rapid expansion of these statewide initiatives to help eliminate the Commonwealth's skills gap and increase the educational attainment level of its workforce. The Commission offers the following recommendations:

(1) **Educate the state about the benefits of a community college education.** The benefits of a community college education are sometimes overshadowed by the outdated view that a four-year credential is the only path to a secure, professional future. Research shows enrollment in a community college and other short-term specialized training can be the beginning of an educational journey that leads to economic security, particularly for individuals who are uninterested or not ready to pursue a traditional four-year baccalaureate degree. In some cases, individuals with short-term, high-demand credentials can earn as much as, or even more than, individuals with a traditional, four-year degree. The Commonwealth should implement a comprehensive public information campaign to highlight the benefits of attending a community college. A community

college education and awareness campaign will bolster public policy and financial decision-making in support of the Commonwealth's strategic goals, allowing parents and students to make more informed choices regarding postsecondary study.

(2) **Appropriately fund the Commonwealth's community colleges.** For FY 18-19, the colleges requested a \$10.6M increase in the community college operating appropriation. This modest increase will provide the funds for the colleges to continue to offer high quality academic and workforce programs aligned with state and local workforce needs. Pennsylvania's community colleges educate and train the Commonwealth's firefighters, health care workers, welders, truck drivers, and many more workers. Providing this type of high quality, technical education that requires hands-on, intensive training with industry-standard materials and equipment, is costly, and is difficult without appropriate public investment. If the Commonwealth wants to increase its postsecondary education attainment rate and create a highly skilled workforce to support business and industry, it must invest in the providers of that education and training – its community colleges.

Community colleges provide Pennsylvanians with the crucial set of education and employment skills to enter the workforce. Failure to appropriately support them limits their ability to develop new and affordable programs aligned with the Commonwealth's workforce needs. The colleges also requested \$15M to expand existing, and develop new, career pathways for students to ensure they have access to high-quality education, training, and other services that prepare them to be successful in future postsecondary education or career opportunities.

(3) **Support student opportunities beyond the classroom.** In addition to supporting students' pursuit of a postsecondary credential, more support is needed for internships, on-the-job training and student placement. Internships and experiential learning are important components of student learning, and more employers need to be incentivized to offer these opportunities for students.

(4) **Support existing dual enrollment programs and establish a statewide dual enrollment program.** Pennsylvania is only one of four states that does not have a state funded dual enrollment program, despite overwhelming evidence of its benefits, including reducing the average time-to-degree and increasing persistence and completion. In the 2016-2017 academic year more than 15,500 high school students enrolled in courses offered by Pennsylvania community colleges. The Commonwealth should support and value the important role dual enrollment plays in its education and workforce development systems in funding priorities and policy direction so that even more students have access to these programs. Pennsylvania's ESSA Consolidated State Plan includes a goal to increase the number of Advanced Placement tests given in high schools by 46 percent by 2020<sup>1</sup>, but this preference for AP over dual enrollment does not support – and will likely hinder – the expansion of dual enrollment opportunities for students. The establishment of a specific target only for AP enrollment is a disincentive for secondary schools to partner with community colleges to offer dual enrollment in lieu of partnering with the College Board to offer AP coursework. The Commission recommends that the Commonwealth value all rigorous coursework that provides students a pathway to postsecondary credentials.

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<sup>1</sup> <http://www.education.pa.gov/Documents/K-12/ESSA/Resources/PA%20ESSA%20Consolidated%20State%20Plan%20Final.pdf>



(5) **Ensure programs are aligned with student schedules and learning styles and that**

**students can access them.** Students entering training programs can range from high school students to middle-aged workers and have varying degrees of education and experience. While some students may have the ability to enroll in a full-time program, others juggling multiple life responsibilities may only be able to enroll part time. Education providers must be able to offer programs that meet students' individual needs. This is an area in which community colleges particularly excel, offering programs in various formats (traditional, online and hybrid course instruction) and on flexible schedules (nontraditional, part time, weekend and overnight courses). However, transportation and child care costs are barriers for many students. Funding should be provided to eliminate these barriers.

(6) **Support effective partnerships.** Cross-sector partnerships rely on the commitment of all interested parties. State policy should incentivize and support these partnerships by offering financial and technical assistance, identifying best practices and providing opportunities for educational entities and partnerships to share best practices on a regional and statewide basis.

Thank you for the opportunity to provide testimony on the role community colleges play in Pennsylvania's education and workforce development systems. We hope that the General Assembly will recognize the importance of supporting the Commonwealth's largest provider of public postsecondary education by including a \$10.6M increase in the community college operating line in the Commonwealth's FY 18-19 budget. An investment in community colleges is an investment in Pennsylvania's long-term economic vitality and strength. We look forward to

working with the Chairmen, and Members of the Committee to make these budget and policy recommendations a reality.

## Appendix A

The programs highlighted in this Appendix are just a representative sample of the efforts of Pennsylvania's 14 community colleges to provide technical education and career readiness in the Commonwealth. The colleges' course offerings evolve regularly in order to be responsive to the needs of their communities, employers and students. For further information on Pennsylvania's community colleges, visit [www.pacommunitycolleges.org](http://www.pacommunitycolleges.org).



The Community College of Allegheny County (CCAC) has built dozens of pathways to move students from postsecondary career and technical education into exciting and high demand workforce training. CCAC is engaged in a major reinvention of our workforce initiatives, taking the work of the Allegheny Conference's Inflection Point Report on supply, demand and the future of work in the Pittsburgh Region as our starting point. With additional research, the College has identified not only where the workforce demands will be, but how our regional educational institutions are addressing that demand. As a result, we have identified the gaps – the places where the need for workers will not be met. It is here that we are focused on developing the K-12-Higher Ed-Business and Industry partnerships that will create the rich pathway needed for the 21<sup>st</sup> century.

To be sure, CCAC is addressing the more traditional pathways. The creation of seamless transitions from high school to college to career make clear the pathway to opportunity. Through a variety of partnerships, CCAC places in the hands of these students a variety of options that lead to employment in fields like Multimedia Web Design, Information Technology, Electronic Engineering Technology, and Mechatronics. CCAC has aggressively sought opportunities for expansion, adding a liaison program so that CCAC faculty can work with high school teachers, bringing dual enrollment offerings to schools that lack the credentialed teacher needed to offer the college curriculum. This new agreement continues to expand the reach of our programs semester after semester.

CCAC has established High School Academies to provide college-bound students with the opportunity to develop advanced technical skills and earn college credit toward an associate and/or bachelor's degree while still in high school, with the expectation that they will continue their studies at CCAC or transfer their credits to a four-year institution to earn a college credential or industry-recognized certification. Through the academies, students experience college-level coursework, learn to use the resources and services available to them and have access to quality classes taught by experienced faculty. All credits earned will appear as completed courses on these students' CCAC college transcripts, establishing the transferability of these courses. Students will earn, where appropriate, recognized industry certifications and prepare for jobs that are in high demand. The academies include courses in the following program clusters that lead to jobs, including Business, Social Services, Health Care, Skilled Professional, and Information Technology.

CCAC leads the state in SOAR articulation agreements with 75 agreements covering 20 different programmatic areas and 34 unique CCAC programs. These articulations save students money on college tuition and time to the degree – not only because they get a head start on college, but because the pathway keeps them on track.

Our new initiative takes on the skills gap in a profoundly different way.

The CCAC, with the support of the Commonwealth, the County, the City and the region's premiere Foundations, are bringing together, along with the talents and insights of regional employers, the synergy and innovations necessary to build a workforce ecosystem. This collaboration will build and support programs, find and recruit talented students, ensure curricular alignment with industry needs, and create

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hands-on opportunities to work in and alongside talented professionals in the field. The initiative will broaden the understanding of students about the skills, attitude and commitment it takes to be a part of the 21st Century workforce, place the students into good-paying jobs with our industry partners, and respond to the next generation of needs created by our success as a region.

The Community College of Allegheny County is home to a wide array of workforce development programs. Individually and collectively, these providers comprise an effective system for addressing the workforce demands of the County's employers. Through a series of interviews with both employers and providers, we have identified numerous examples of interagency collaboration and innovation that highlight the effectiveness of the County's system of providers and support organizations. Overall, this initiative will increase the synergy of the region's workforce development system, improving our ability as a community to respond to the current needs of the County's employers.

Yet, while the County's strong demand-driven approach has been successful at meeting employer's needs in the past, economic change and demographic shifts in the workforce, both at a national and a local level, are requiring workforce development systems to extend their reach beyond issues of training and education. As the population ages, the traditional "entry-level-age" worker has become a smaller component of the workforce. Pittsburgh is a national model for renewal and we are dedicated to addressing the major challenge facing a growing economy: finding the new workers to fill the jobs.

In order to avoid such a shortage of workers in the region's workforce development system, we must find a more effective way to transition high school graduates and even high school dropouts into training programs that facilitate entry into the workforce and ensure that students have access to high-quality training as well as a full complement of support services that will ensure their success in these rigorous programs. The initiative works best when it is not only aligned with local workforce trends, but provides opportunities for hands-on training with cutting-edge technology.

We are building the mechanism to ensure that our K-12 schools stand ready to place students into the state-of-the-art pipeline that not only trains them, but links them to the industries who will employ them through every step of their training.





The Community College of Beaver County (CCBC) aims to provide pathway opportunities for middle and high school students, guiding them seamlessly from secondary education to post-secondary education to employment. With its membership in The Beaver County Energy & Advanced Manufacturing Partnership, CCBC exposes hundreds of middle school students to transformational career opportunities. In addition, CCBC offers its signature High School Academies in Aviation, Nursing and Process Technology. To provide increased access to educational opportunities for high school students, CCBC's High School Academies were created in 2015. Academy students have earned up to a year of college credit before they graduate.

A unique program for our institution, which serves as a key pathway strategy, are our High School Academies. A High School Academy is a dual enrollment academic program that affords junior and senior high school students the opportunity to earn up to 28 credits by spending half of their high school day taking CCBC courses. Currently, CCBC Academy students attend from 41 high schools in five different counties (Allegheny, Beaver, Butler, Lawrence, and Washington). While in the program, students are exposed to career opportunities, academic pathways from associate degrees to doctorates, and hands-on, interactive, high impact educational practices.

CCBC has identified programmatic and institutional outcomes that include the following:

*Programmatic*

1. Students will be able to share and demonstrate career-specific knowledge.
2. Students will be able to apply and evaluate the use of employer-desired soft skills.
3. Students will be able to identify career-specific pathways.

*Institutional*

1. 60% of students will complete the academies.
2. 50% of the graduates will matriculate to CCBC.
3. 75% of the students will be satisfied with their Academy experience.

To date, CCBC has met or exceeded programmatic and institutional outcomes.

- CCBC graduated 86 high school seniors from the Aviation and Health Academies in May 2017. Of those seniors, all 86 went on to college – including 64 who are attending CCBC full-time this year.
- Health Academy students earned cumulative GPAs close to their CCBC peers, and their overall grades in Anatomy and Physiology were higher than those of their peer college students.
- There are 174 high school students enrolled in CCBC's three High School Academies this year.

The primary barrier, after funding, continues to be transportation. Whereas some school districts own their own transportation system, others contract theirs out; yet, there are some who cannot afford additional transportation for any student initiative. To that end, some students who are qualified to participate in dual enrollment programs are unable due to the school system's economic challenges. Transportation continues to make the educational playing field unequal for poor schools versus affluent ones.



## Career and Technical Education Pathways at Bucks County Community College

Bucks County Community College works throughout the community to provide career and technical education to the county's most vulnerable populations. Strong partnerships with County administrators, the Bucks County Workforce Development Board, PACareerLink, K-12 educators, and the business community support the college's work in providing pathways to high-priority occupations for individuals at various stages in the workforce continuum. Adult basic education and ESL programs are also available to prepare students for workforce success.

Bucks has robust pre-apprenticeship programs, developed in partnership with the business community, that train and feed entry-level workers into good paying careers in manufacturing. These programs focus on unemployed/underemployed job seekers with barriers to employment, and have job placement rates of over 92%.

For example, our **Metalwork Training Program and Industrial Maintenance Training Program** have produced several graduates who have pulled themselves out of unemployment or underemployment to the robust earning levels. Here are some of their stories.

**Veronica Green** is a single mom with four school-age children, who worked full-time overnight while taking the 12-week metalwork-training program during the day. Since completing the program in 2016, she was hired by one of the college's long-standing partner companies, and now earns an hourly wage that is more than 50-percent higher than her previous job. Veronica recently told Susan Herring, our director of Workforce Development, that "I want to thank you for giving me the opportunity to go through the program. Had you not been willing to give me a chance I sincerely don't know where my family and I would be."

**Dan Hanes** is a veteran who had trouble finding a job after returning from Afghanistan. After completing the metalwork-training program in 2014 he was hired by Waste Gas, a college partner, and started work right after graduation. He began at \$13 an hour and has since had multiple promotions and is now earning more than \$50,000 a year.

**John Burkhart** is a single dad who was looking to earn a sustainable living to support his daughter. After completing the metalwork-training program in October 2015, he immediately was hired by college partner M&S. He started at \$14 an hour and is now earning \$50,000 a year, and he is thrilled with his experience at M&S.



**Bill Lawson** had recently lost his job in the printing industry as his position had been automated. He graduated from metalwork training in January of 2018 and began working the same month at KVI. He accepted a position for \$18 an hour, and with benefits and overtime is making \$50,000 a year.

**Angie Messick** was a waitress when she enrolled in metalwork training. She graduated in September of 2016 and started working at KVI. She began earning \$16 an hour, but has since received multiple raises as well as employer paid trainings and is now earning over \$50,000 a year.

**Robert Hambrecht** had been a 9-1-1 operator and left because of the stress of the position. He graduated in December 2017 from our industrial maintenance-training program and started that same month at Double H Plastics. He is earning \$22 an hour and is thrilled with this position. With overtime and benefits, he is earning well over \$50,000 a year.

### Expansion to High School Youth

This pathway to in-demand occupations in manufacturing was expanded to high school students through the college's In-School Youth program, providing at-risk youth the work readiness skills and industry recognized credentials that prepare them for employment in manufacturing and/or entry into pre-apprenticeship programs. Currently, Bucks is working with the Quakertown School District and the Bucks County Workforce Development Board to pilot a program that will provide pre-apprentice manufacturing training to high school seniors.

Bucks collaborates with the Bristol Borough and Bristol Township School Districts and Lower Bucks Hospital to offer high school students the opportunity to gain valuable skills in the medical profession while still in school. Called Medical Pathways at Lower Bucks, students also earn college credits as part of the program.

### Technical Entrepreneurship Degree Program

In addition, Bucks County Community College was the first to offer a unique program in partnership with the technical high schools in our county and Bloomsburg University. The Technical Entrepreneurship Degree Program allows students at Bucks County Technical High School in Bristol, Middle Bucks Institute of Technology in Jamison, and Upper Bucks County Technical School in Perkasio to earn up to 29 college credits from Bucks while in high school. They can then complete the remaining 31 credits of a 60-credit associate degree in technical entrepreneurship from Bucks in just one year. Students are then guaranteed admission to Bloomsburg University in Bloomsburg, Pa., to finish the final two years of a Bachelor of Applied Science in Technical Leadership.

## Dual Enrollment/Special Admissions/PLA

Bucks offers dual-enrollment for high school students to take college courses at their schools, taught by Bucks professors. We also offer high school enrichment, allowing students who are juniors and seniors in good standing to enroll in daytime classes at Bucks with appropriate permission from guidance counselors. Moreover, prior learning assessment is available for high school students who have attended technical school and for adults to earn credit for their experience.

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Bucks County Community College's experienced and dedicated faculty and staff are committed to providing individualized attention and support for each student, ensuring positive outcomes that have the power to transform lives.



## **Butler County Community College: Career and Technical Education Pathways for Students from High School to Postsecondary**

*Butler County Community College (BC3) can award credits to students graduating from eight career and technical education centers with which the college has articulation agreements, to students within the SOAR program, to students within a College Tech Prep program and to students attaining Workforce Development certificates.*

### **Career and technical education centers**

BC3 enables graduates from eight high school career centers to apply up to 15 credits toward associate of applied science degrees.

Among those partnerships and their pathways:

Students successfully completing a Health Assistant program at Butler County Area Vocational Technical School can apply 10 credits toward BC3's 68-credit Medical Assistant degree.

Students of Clarion County Career Center, Jefferson County-DuBois Area Vocational-Technical School, Lawrence County Career and Technical Center, Lenape Tech and the Venango Technology Center who successfully earn a cosmetology certification from the Pennsylvania State Board of Cosmetology can receive 15 credits toward BC3's 60-credit Technical Trades: Cosmetology Management Option degree.

Students successfully completing a Computer Systems, Network Engineering and Cyber Security program at A.W. Beattie Career Center can receive six credits toward BC3's 68-credit Computer Information Systems-Network Administration degree.

Students at any of the eight vocation-focused secondary institutions successfully receiving National Occupational Competency Testing Institute or Industrial Competency Exams certifications can receive 12 credits toward BC3's 63-credit Technical Trades: HVAC Option degree.

### **SOAR**

Through SOAR (Students Occupationally and Academically Ready), students at any vocation-focused secondary institution can receive between four and 12 credits toward BC3 associate of applied science degree programs in Accounting, Graphic Arts, Computer Information Systems-Network Administration, Electronics Technology, Technical Trades: HVAC Option, Office Administration-Executive, Digital Audio and Video Production, and Emergency Services-Police Services Option. They can also receive up to 15 credits toward BC3's 30-credit Machine Tool Technology Certificate.

### **College Tech Program**

Students in Accounting I and II in the Butler Area School District's College Tech Program can receive four credits toward BC3's associate of applied science degree in Accounting; and up to 10 credits in applicable BC3 programs by studying Computer Aided Drafting I (or Technical Drafting I and II) and Computer Aided Engineering or Computer Aided Architecture; and Electronics and Digital Electronics; and CTP Algebra I and II; and Pre-Calculus Part I or Honors Pre-Calculus.

Additionally, high school juniors in BC3's Oil and Natural Gas Industry Workplace Certificate can apply 15 credits into BC3's 24-credit Energy Technology Workplace Certificate.

### **Workforce Development**

Noncredit Workforce Development credentials in BC3's Manufacturing Pre-Apprenticeship, Auto Technician and Human Resources Management programs can be stacked into credits toward the attainment of other certificates or degrees.

Students achieving BC3's Manufacturing Pre-Apprenticeship program's three National Tooling and Machine Association and two National Institute for Metalworking Skills credentials, combined with the successful completion of an assessment test, can earn three Machining I 10 credits applicable toward BC3's 17-credit Basic Manufacturing Workplace Certificate.

Those attaining BC3's Auto Technician Certificate's Automotive Service Excellence Auto Maintenance and Light Repair certification can earn three credits applicable toward BC3's 30-credit Technical Trades: Applied Technology Certificate.

Students achieving BC3's Human Resources Management Certificate can earn three credits applicable toward BC3's 60-credit associate of applied science degree in Human Resource Management.

## Career and Technical Education Pathways from High School to Postsecondary Delaware County Community College

Delaware County Community College (College) has a 25-year history of partnering with secondary schools to deliver Career and Technical Education (CTE) using a Structured Pathway (Pathways) approach.

The College has 14 Pathways that provide the opportunity for students to complete a career certificate (18-27 credits), up to 50% of the credits (30) required for an associate degree or the 60 credits needed for an associate degree. The Pathways are designed primarily for those in their junior and senior years of high school although any student who demonstrates college readiness can enroll, including those in the 9<sup>th</sup> grade. The curriculum is sequenced so that one or two courses (six to eight credits) are offered in the fall, spring and summer semesters over two years.

Some sample Pathways include: Allied Health (Medical Assistant and Medical Billing and Coding); Business Administration; Computer Science (Interactive Multimedia, Network Engineering, and Web Programming); Criminal Justice; Electro-Mechanical Technologies; General Studies and Pre-Nursing. Structured Pathways offer multiple opportunities for students to accelerate their postsecondary education and training, at a reduced tuition, while still in high school. Graduates can enter the job market with specialized training (salaries beginning at \$45,000), complete their associate degree (up to 50% of the cost) and/or transfer to a four-year university as a sophomore or junior, frequently with reduced tuition or scholarships.

The program descriptions for each Pathway identify specific performance outcomes. For example, graduates of the Electro-Mechanical Certificate will be able to connect simple electric circuits following schematic diagrams; graduates of Network Engineering will be able to troubleshoot network connectivity problems and establish network security; and graduates of Medical Billing and Coding will be able to accurately code a medical report and describe insurance carrier reimbursement systems.

A popular Pathway is the Electro-Mechanical Technologies Certificate. Students can graduate from high school with the 27 credit Technologies Certificate. They can then enroll in the Advanced Technology Associate Degree program at the College for one year. After receiving the AAS degree, students can transfer to Drexel University's Goodwin College of Professional Studies to complete a Bachelor of Science in General Studies, at a 40% tuition reduction, over two years. Currently there are 10 students ready to complete their associate degree in May 2018; several of those students plan to enroll in Drexel's program. A second cohort of 10 CTE students began this Pathway in September 2017.

Currently the College has CTE partnerships with two Intermediate Units and three secondary schools in both Delaware and Chester counties.





## **CTE Pathways from High School to HACC**

HACC offers many Career and Technical Education (CTE) pathways for high schools students:

- College in the High School, where students take college classes in their high school;
- Dual Enrollment, where students take college classes on a HACC campus; and
- Local articulations and the SOAR (Students Occupationally and Academically Ready) statewide articulations, which award credits for students when they enroll at HACC for work successfully completed in high school.

### **College Credit Earned while in High School**

Demand for dual enrollment (DE) continues to increase and HACC diligently works to find creative ways to add value to these opportunities (such as ensuring that HACC courses count toward students' high school graduation requirements), as well as identifying creative ways to offset the DE costs for the students (use of grant money). HACC continues to offer flexibility with DE through on-campus classes, blended classes and virtual classes further enabling CTE pathways to expand.

HACC currently has 47 active SOAR articulation agreements, encompassing 24 CTE programs offered at our campuses. When high school students qualify to earn the SOAR credits and continue in the same career pathway started in high school, students coming to HACC can typically earn 9 credits, but may earn up to 12 credits in some instances. This opportunity enables high school students to seamlessly transition to HACC, through non-duplicative coursework where their CTE programs left off. The time and cost savings are invaluable.

These programs are continually being enhanced to meet the changing needs of high school students and more recently have significantly expanded to the Career and Technology Centers (CTCs) throughout the region. HACC also accepts as credit some industry-recognized credentials earned at the secondary level and is actively working to establish pre-apprenticeship and apprenticeship pathways for high school students.

### **HACC's Workforce Development Initiatives**

Two workforce initiatives are gaining momentum and have the potential to establish solid CTE pathways for high school students.

#### **I. Pre-apprenticeship into apprenticeship**

A pilot pre-apprenticeship pathway stemming from welding, machining and electromechanical CTC programs while students are still in high school could lead to HACC's Industrial Manufacturing Technician (IMT) Apprenticeship Program. Ideally, the CTCs could assist their eligible students in connecting with an employer interested in an apprentice prior to graduation. After graduation, the apprenticeship coursework could continue at HACC.

## **2. STEP Academy and Career Readiness Skills**

The STEP (Set goals, Take action, Expect success and Put in the work) Academy focuses on career readiness skills and prepares the participating high school students for work or post-secondary schooling and culminates in the students obtaining skills in manufacturing, healthcare, hospitality and logistics – all in-demand CTE programs.

### **HACC's Partnership with the TechLink Consortium**

HACC uniquely positions itself as a leader in the state through the TechLink Consortium. In existence since 2006, the Consortium is managed through HACC via Perkins-funded personnel and is comprised of seven CTCs within our service region:

- Adams County Tech Prep
- Carlisle Area School District
- Cumberland Perry AVTS
- Dauphin County Technical School
- Dover Area High School
- Lancaster County Career & Technology Center
- York County School of Technology

Regional collaboration between the TechLink partner schools, HACC administration and employees and business and industry leaders afford the group opportunities for frank discussions with all “necessary parties at the table” at once on many topics, including the following:

- Program expansion
- Creative pathway initiatives
- Identification of workforce needs
- Seamless curriculum progression from secondary to post-secondary
- Field trips
- Career day
- Job shadowing opportunities
- Pre-apprenticeship and apprenticeship

This valuable partnership directly connects the greatest potential pathway leading to CTE program success: high school students from CTCs to HACC.

### **Some of the Barriers that exist to CTE Pathways or Partnerships**

Lack of financial aid eligibility for short-term credential attainment. Many students are unable to pay for training, even if that training is the pathway to a sustainable wage in the long run.

Funding for start-up costs for work-based learning experiences, pre-apprenticeships, apprenticeships, etc.

Employer Engagement. Employers are needed to support students by providing internship opportunities and hiring graduates.





Lehigh Carbon  
COMMUNITY COLLEGE

## Lehigh Carbon Community College Dual Enrollment Overview

### Overview

The Dual Enrollment program at Lehigh Carbon Community College annually enrolls almost 2,000 students in nearly 100 different courses from 18 public school districts in Carbon, Schuylkill and Lehigh Counties. A total of 26 percent of these students go on to study at LCCC.

The college is owned by 13 sponsoring public school districts who work closely to offer these opportunities. However, even though the cost of dual enrollment courses are greatly reduced, cost is still a hardship for a lot of students when combined with the price of textbooks. That is why the LCCC Foundation works diligently to locate scholarships for students.

### Program Highlights

#### ASD Scholarships

Hundreds of high school students in the Allentown School District are getting head starts on their college careers with help from the district, the college and PPL Foundation. Last fall, 240 Allentown high school students enrolled in LCCC courses as part of a dual enrollment program funded with a \$10,000 grant from the PPL Foundation. The grant funds tuition for juniors and seniors who are from low-income families and attend Allentown public high schools.

#### Student Spotlight

Three members of the Stuart Family of Allentown have earned dual enrollment credits. Josiah Stuart, who last year as a William Allen High School senior, took Introduction to Microbiology and Drawing I in the morning at the college, then walked across the street to Lehigh Career and Technical Institute to take classes in carpentry. He is now studying wildlife biology as a junior at Edinboro University. His brother Nathaniel earned both his high school diploma from William Allen and his associate degree from LCCC at the same time and is now a student at Stanford University. Their little sister Ruthie is a dual enrollment student at Williams Allen HS, where she is earning college credits.

In May 2017, 11 students who graduated from Lincoln Leadership Academy Charter School also had enough credits to also earn their associate of arts degree from LCCC.

#### High School – College Scholars Program

The High School-College Scholars program is a dual enrollment program where select high school juniors and seniors have the opportunity to earn an associate of arts degree at the same time they are completing their high school degree. Students would be granted permission to

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take all junior and senior year classes as dual enrollment courses offered through Lehigh Carbon Community College. When the student graduates from high school with their high school diploma, they also graduate from LCCC with their associate of arts degree, which transfers to four-year colleges. The pilot program has been launched in Tamaqua, Parkland and Lehigh School Districts.

#### LCCC Pathways

Students who successfully complete a program of study at an area Career and Technical Center and come to LCCC in an identical or aligned program may be eligible to receive prior learning credits for specific courses. The program is available at Lehigh Career and Technical Center, Carbon Career and Technical Center and Schuylkill Career and Technical Center.

The Emerging Healthcare Program is a partnership established more than 10 years ago with Lehigh Career and Technical Institute and Penn State-Lehigh Valley in which high performing LCTI students are offered 8 credits of college level anatomy and physiology.



At Luzerne County Community College, we value the opportunity to partner with our local school district leaders to implement innovative and engaging educational and career projects within their school, after school hours or on our campus. Our common goal to increase student success is the foundation of all of our partnerships. For this reason we have developed several initiatives with three goals in mind:

1. Expose high school students to college college-level expectations to inspire self-confidence, and to better prepare them to enter the college arena with a clear sense of career and academic expectations.
2. Help eliminate post-secondary remediation for academically disadvantaged high school students.
3. Inspire academic and career success.

## **PARTNERSHIPS**

### **COLLEGE READY MATH**

The LCCC math faculty developed a secondary level college readiness math course in partnership with 8 local high schools in 5 school districts. This innovative program implemented in the high school and taught by trained high school teachers, focuses on 1) remediation in the first half of the school year. The teachers use engaging teaching and learning strategies followed by proactive exercises on a module-based computer system which promotes mastery and self-paced learning, using Pearson's MyMathLab. 2) On the second half of the year students earned 3 college credits, by enrolling in Math 101 college level course, required by most liberal art majors. 3) Supportive services are provided via College campus visits which include activities such as college tours, exploring clubs and activities, career exploration & assessment, major overviews, financial aid, advising and college planning. Textbooks, access codes and tuition are covered 100% for all students in this program.

#### **Example of Results:**

- 1<sup>st</sup> Cohort – WBASD Fall 2014 – 57 Students took Math 101 in spring 2015 in their HS.
- Total Enrolled at LCCC post HS: 25 or 44%.
- *Of Those Enrolled*
- Top major: General Studies 52%. EDU was the 2<sup>nd</sup> most popular major.
- Fall to Fall Retention was 88% (Compared to 52.2% regular or 48.4% developmental, LCCC First Time students).
- 56% had a GPA above 2.0 – 1<sup>st</sup> year.
- 32% have GPA above 3.0 - 1<sup>st</sup> year.
- 8% have a perfect 4.0 GPA - 1<sup>st</sup> year.
- 2 students are graduated in May 2017.

*English Ready has now been implemented to start in two high schools in Fall 2018.*

**ENHANCED EARLY COLLEGE /DUAL ENROLLMENT PARTNERSHIPS:** focused on helping high school students earn a college degree while in high school.

For more information, please visit: [www.luzerne.edu](http://www.luzerne.edu) or contact the President's office at 570-740-0388

All high school students deserve the opportunity to explore a post-secondary education leading to fulfilling careers. We, at Luzerne County Community College help to make this a reality by giving students from all backgrounds, but especially those who are first generation, low income students the opportunity to participate in our Early College program. LCCC Early College (EC) program is more than just an opportunity to earn college credits while in high school, but also to gain career insight, academic skills, and save on college cost. We lower our EC tuition to as low as \$40 per credit. In addition, we disbursed last year over \$23,500 in EC scholarships for students for whom \$40 a credit was beyond their reach.

#### *Example of This Partnerships*

##### Berwick High School

Beginning in Fall 17 Berwick High School began transporting high school students to the Nanticoke campus to enroll in morning classes towards an associate's degree.

##### Crestwood High School

Crestwood High School is expanding its EC offerings to allow qualified high school sophomores, in addition to junior and seniors, the opportunity to attend LCCC in the spring of 2019 during the traditional school time. The school district has identified transportation as a barrier for many of their students who were unable to participate in the Early College Program during the Fall 17 and spring 18 semesters. The school district will now provide transportation for students from Crestwood High School to LCCC's Nanticoke campus starting in the fall 2018 giving more students the opportunity to take college classes during the day. Currently over 125 students are participating in this program. Two students will be completing their associate degree (?) in Welding this May 2018, a month prior to their high school graduation.

##### Bloomsburg High School

Starting in the Fall 2018, Bloomsburg high school students will take college classes towards a degree at the end of their traditional school day on site.

### **LCCC KEYS EDUCATION AND EMPLOYMENT PATHWAYS (KEEP)**

Luzerne County Community College Keystone Education Yields Success (KEYS) Career Pathway Bridge program is one of two in the state helping GED candidates who are also recipients of Temporary Assistance for Needy Families (TANF) enroll in a high priority educational paths to complete a college degree while also completing their secondary degree.

### **SKILLS USA**

11<sup>th</sup> and 12<sup>th</sup> grade students from 40 CTE schools in the region and 50 of their faculty and staff and our faculty and staff participate in the SkillsUSA competition each winter on the campus. SkillsUSA is an opportunity for high school students, who are preparing for careers in the trade, technical and skilled service occupations to learn and practice personal, workplace, and technical skills. Gold medal winners at the competition at LCCC are now eligible to compete at the State Conference in April.

For more information, please visit: [www.luzerne.edu](http://www.luzerne.edu) or contact the President's office at 570-740-0388

## **PARTNERSHIPS WITH EMPLOYERS TO STRENGTHEN WORKFORCE PIPELINE**

Luzerne County Community College is the educational partner in a State Registered Apprenticeship with Greiner Packaging in Pittston, PA. Students are identified in their Junior and Senior year and hired by Greiner in the Summer of their graduating year. The students work at the facility and attend classes at Luzerne that are paid for by Greiner. Students are working toward their A.A.S. Degree in Mechatronics. The company has been hiring two students per year for the past two years and hopes to expand the program to other job categories moving forward.





## Montgomery County Community College

Montgomery County Community College (MCCC) provides postsecondary pathways for high schools through multiple forms of engagement opportunities in Academic Affairs and Student Affairs. Engagement opportunities provide high school students with further avenues to explore educational offerings beyond high school. MCCC engagement opportunities include:

- **Bridge to College (BTC):** BTC is a summer program providing college readiness to high school students with high functioning Autism Spectrum Disorders and other special needs. The BTC I program is designed as the student's first interactions within a college environment; while BTC II focuses on the student who is ready to begin college classes. Students can earn college credit upon successful completion of the BTC I and II programs. In the past 5 years, the BTC I and II programs have assisted 73 students with transitioning to college readiness with 94% continuing to take credit courses at MCCC.
- **Bridge to Employment (BTE):** MCCC manages three Bridge to Employment sites with Norristown Area High School, Phoenixville Area High School, and Wissahickon Senior High School; and is partnered with Johnson & Johnson companies DePuy Synthes, Janssen Biotech, and Johnson & Johnson Diabetes Care companies. Company employees facilitate on-site activities at the high school to introduce a variety of health care careers to students, who also take dual enrollment classes through the College. Since 2012, approximately 200 students have participated in BTE programs managed by Montgomery County Community College.
- **Dual Enrollment:** MCCC's Dual Enrollment program partners with 27 high schools across the Montgomery County. In 2017, 2,095 high school students participated in 164 courses and 187 sections. Courses offered are from all academic divisions across the College including Spanish, Algebra, Introduction to Criminal Justice, and World Civilization. The Dual Enrollment partnership with Upper Moreland High School provides junior and senior high school students with the opportunity to complete at least 30 credits toward their associate degree by taking a combination of college credit courses at the high school and Central Campus in Blue Bell.
- **Gateway to College (GtC):** The GtC program was recognized as a 2018 Bellwether Finalist by the Community Colleges Futures Assembly. GtC is an alternative education model for supporting secondary education completion of disengaged and at-risk high school students, and utilizes innovative support strategies and forward-thinking in the holistic development of students. A total of 116 students have completed the program, and 41 continued to MCCC for a postsecondary credential.
- **POWER Program:** The POWER program supports all individuals in mental health recovery develop their educational and career potential through a two-credit college course focused on work and life skills. Students, who complete the POWER program and continue their education at college, can enroll in POWER Plus which serves as an educational and supportive class that meets weekly. Since the POWER Program's inception in 2006, 60 students have completed the program and continued to take courses at the College. Over 40 associate degrees or certificates have been obtained by students who began in the POWER program.
- **Academic Camps:** Academic Affairs has supported high school students with 3-4 academic camps offerings per-year. The camps include a community partnership, and are geared

towards high school exploration of college program offerings and career pathways. The Immersion Essentials camp, for example, was a week-long STEM experience camp through the Immersion Science Program of Fox Chase Cancer Center, and offered for free to 8<sup>th</sup>, 9<sup>th</sup>, and 10<sup>th</sup> graders. Thirty-two students participated in the camp, which simulated undergraduate to graduate school experiences for students wanting to pursue careers in science and health.





## Northampton Community College

Northampton Community College has hired new *College Connections Specialists* to work full-time with superintendents, principals, guidance counselors and students in all of our sending high schools in Northampton and Monroe counties. They provide detailed information about NCC's college degrees, specialized diplomas and certificate programs. This informs these administrators about the breadth of our programming, career opportunities in high priority occupations in our geography, and the value from quality and financial perspectives of the College. Credit and non-credit programs are discussed and offered as viable post-secondary education options. College administration expects to see increasing student numbers from sending schools in the short term.

Dual enrollment is another path to college that Northampton offers. While qualified students are still in high school they can enroll in certain college courses live, hybrid or on-line to earn college credits. Paying reduced credit rates and getting a jumpstart on a college program saves both hard dollars and time to completion, whether earning a terminal two-year degree or transferring to a four year institution for a bachelor's degree.

A variety of grant-funded training programs offered by Northampton Community College focus on certain segments of the population. This type of funded programming is free of charge to those who qualify (One segment *out-of-school youth*). As soon as a student graduates from high school they are in this category. Many of these programs are focused on high priority occupations in industrial skills and manufacturing, both important market segments in the Lehigh Valley. Information about this type of programming can be shared by our *College Connections Specialists*, through advertised program information sessions, and through the CareerLink. Program length is usually three to six months, and prepare successful completers for good entry level positions in the field. An example of this programming is our Workforce Innovation Fund grant offering a variety of micro-credentials appealing to hiring managers in industry.

The College is currently finalizing program pathways for each credit program and specialized diploma. These clear illustrations or "roadmaps" for program success walk a student and parents through each course, sequence of courses, time to finish and associated costs. By simplifying and clarifying time and financial investments, students maximize their time and effort, and minimize any chance for wasting time and money on coursework unrelated to their program.



## **PATHWAYS FROM HIGH SCHOOL TO POSTSECONDARY**

Pennsylvania Highlands Community College has been working with high schools and their students for nearly 15 years. In 2004, Penn Highlands started its dual enrollment program and aptly named it Accelerated College Education (ACE). ACE started with just seven high schools participating, allowing their students to earn college credits while still in high school.

ACE grew rapidly over the years. At its peak, ACE had over 1,600 students in more than 50 high schools taking credits. This student growth, accompanied by high schools eager to join, demonstrated the benefits that dual enrollment programs like ACE have for high school students. ACE allows high school students to earn their college credential faster and at a lower cost.

Program growth is always good, but it also comes with its challenges. In order to sustain growth while holding students to proper standards, the College will be looking to expand on its ACE program with three separate pathways for high school students, beginning in 2018. Collectively, Penn Highlands is calling this the High School Pathways initiative.

The individual paths include Penn Highlands Academy, Associate in High School, and ACE. Penn Highlands Academy is a 3+1 model approach that allows students to complete their degree in just one year after taking classes for three years at their high school. The Associate in High School pathway allows students to complete both their high school diploma and associate's degree simultaneously. The ACE pathway is the standard dual enrollment program that started it all, which allows undecided students the ability to choose select courses for both high school and college credit.

In addition to the College's High School Pathways program, Pennsylvania Highlands has well-established partnerships and articulation agreements with the career and technology centers (CTCs) throughout the Southern Alleghenies. These include Individual program articulations and Students Occupationally and Academically Ready (SOAR) agreements with the Pennsylvania Bureau of Career and Technical Education.

Additionally, Penn Highlands is heavily active in developing and promoting its capacity to offer Credit for Life Experience (Prior Learning Assessment) for those in the workplace and/or military service members. This enables those seeking to advance the ability to leverage their existing technical skills and/or background for credits within a college program.

Penn Highlands now offers a Small Business Management degree for those coming from CTCs or utilizing Credit for Life Experience. This creates a pathway for them to find career success through a program that develops management skills and promotes leadership entrepreneurship.

## Community College of Philadelphia K-12 Initiatives February 2018

**New Faces Program** partnership with District I 199C - students at Roxborough High School enrolled in the health-related technology CTE track take summer college courses and receive hands-on experience and instruction from College faculty specific to STEM content and careers, & college readiness. This is year 3 of a 5-year grant, serving approximately 45 students.

### 2015-2016

15 students participated in a College 101 workshop.

10 students participated in a 2-week summer STEAM workshop facilitated by College's chemistry faculty.

8 students took summer ACE courses.

### 2016-2017

20 students attended a Healthcare Pathways day at the College to include workshops in the Biomedical Equipment Technology lab and the Medical Assistants lab.

15 students participated in a College 101 workshop.

5 students took summer ACE courses.

6 students participated in Early Scholars dual enrollment.

7 students participated in a 2-week summer STEAM workshop facilitated by College's nursing faculty.

**Advance at College** program offers dual enrollment opportunities to high school students in Philadelphia. This program was enhanced last year by a \$1 million grant from the Commonwealth – the Early Scholars scholarship. Outcome: More than 1100 students participated. For all of the College's dual enrollment programs, students learn about college majors, careers and transfer.

**MaST Community Charter School** partnership - dual enrolled students at our Northeast Regional Center can earn associates degrees in business or health care (new offering as of 2017) while simultaneously earning the high school diploma. 2018 will be the first graduating class of 8 students who will have earned their business associates degree.

**Gateway to College** offers students who dropped out of a traditional high school, the opportunity to earn a high school diploma and college credential. Gateway students also have the opportunity to take part in a paid work experience that is aligned with careers in their area of interest. Students are supported by Gateway staff and partner employers.

**Parkway Center City Middle College** partnership with the School District of Philadelphia - students will graduate high school with the opportunity to earn an associate's degree in liberal arts or one of two proficiency certificates (entrepreneurship or computer programming & software development). The first cohort of 121 9th grade students started summer 2017.

**Senior Year Only Program (S.Y.O.P.)** partnership with the School District of Philadelphia – this program will enroll 80 students from City's high schools into a full year of dual enrollment courses earning up to 24 college credits in liberal arts or STEM programs. This program is scheduled to start fall 2018.





Reading Area Community College (RACC) provides five major areas of support of career pathways: 1. creation of strategic position, Director of Academic Partnerships; 2. creation of dual enrollment pathways at high schools and Career and Technology Centers; 3. development of program-to-program agreements with colleges and universities; 4. participation of RACC members on Chapter 339 plan advisory at five of the eighteen public schools as well as both Reading Muhlenberg and Berks Career and Technology Center advisory councils; and 5. outreach through RACC-designed and facilitated professional development of school district staff and faculty.

In January 2014, RACC created a new strategic position Director of Academic Partnerships to start new and grow existing dual enrollment partnerships in order to increase students' access to college credit at Berks County high schools and develop articulation agreements for students to complete a full pathway from dual enrollment, associate degree, to bachelor's degree. RACC has increased its partnership high schools to 15 of 18 public and two private sending schools. In a fall-to-fall trend, beginning in 2014, RACC has increased its student participation by 71%. Of the high school partnerships, nine high schools have programs where students are able to earn at least half their associate degree. Students who have participated in dual enrollment programs and comprised 7% of RACC's direct-from-high school population in Fall 2017.

In leveraging these dual enrollment partnerships with the Berks County Career Pathways alliance, RACC continues to work with high school content experts in developing dual enrollment pathways. An example of these pathways are evident in Twin Valley High School's, located in Morgantown, Business pathway, started in Spring 2018, and Art pathway, planned for Fall 2018. Another example is Wilson High School's, located in West Lawn, having approved an Early Childhood Education pathway for Fall 2018.

Because of RACC staff participating in the Chapter 339 advisory council plans, RACC has focused on creating program-to-program articulation agreements with Colleges and Universities. Since 2014, RACC has created 26 college pathway agreements from an associate degree to a bachelor's degree to ensure early advising for students who are seeking transfer of their associate degree program into a bachelor's degree program. Such program-to-program agreements include Criminal Justice, Social Work, Early and Secondary Education, Business, Accounting, Engineering, Communications, Nursing, Medical Laboratory Technician, Art, Sciences, and Behavior Sciences. College and University partnerships include a variety of pathways for RACC graduates at Pennsylvania State University, Temple, Bloomsburg University, Kutztown University, Millersville University, Lockhaven University, California University of Pennsylvania, Albright College, Bucknell University, Lycoming College, Alvernia University, LaSalle University, Immaculata University, Chamberlain School of Nursing, Eastern Mennonite University, and University of Cincinnati.

One example of a fully-realized career-college pathway is the Berks County Technical Academy to Bachelors of Applied Science in Technology Leadership. The Technical Academy offers Career Technology Center students an opportunity to earn 24 – 29 college credits towards a RACC associate in applied science degree in the fields of Healthcare, Engineering Technology, or Business and Information Technology. After students complete their associates, they can continue onto Bloomsburg University's Bachelor's of Applied Science in Technical Leadership. An agreement first established in

2014, the BAS of Technical Leadership had its first graduating class in May 2017 with four RACC alumni graduates taking classes and earning their bachelor's at RACC's campus through online and on-campus courses.

Because Career Pathways is a new educational paradigm for counselors, teachers, students, and parents, RACC has increased its outreach to the K-12 community by offering professional development about its post-secondary credential programs, certificate to associate degrees, as well as transfer pathways to bachelor's degree programs with one of its university or college partners. Such work includes High Priority Occupation panels delivered to the Berks Area School **Counselor** Association, STEM day for middle and high school students and teachers, partnership panels for parents at the high school locations, and professional development for STEM teachers as part of a 3-day Summer Institute, June 2017.



### College Highlights – Pathways from High School to Higher Education

Westmoreland County Community College has multiple points of entry for high school students who wish to pursue higher education. We take great care in the development of the pathways from high school to college because we know the importance of a well-constructed plan. Many of our community college students rely heavily on us to help them make their way through all the paperwork so that they can see their dreams come true. And sometimes these dreams are dreams of their family and generations before them so a lot is riding on their success. We take this seriously and have created multiple ways for students to pursue an education at Westmoreland.

We start with the pathway of Dual Enrollment. We partner with over 20 local high schools to offer college credit for course work taught in their high school.

- Belle Vernon, Brownsville, Carmichaels, Connellsville, Derry, Franklin Regional, Freeport, Greater Latrobe, Greensburg Salem, Hempfield, Indiana, Jeannette, Laurel Highlands, Leechburg, Ligonier Valley, Mount Pleasant, Norwin, Penn Trafford, United, Valley, and Yough

The programs are administered by the highly qualified teaching staff at the school and the student is permitted to remain in the school to take the classes. This is especially important to some students because transportation may be a challenge. Also, when beginning this journey, trust is important for the student and the parent or guardian. They need to feel that this is a great opportunity and money well spent. Both are top concerns. Tuition for Dual Enrollment is very affordable and high school guidance counselors are well trained in the many programs that we offer at Westmoreland.

We also offer Early College programs that attract a lot of students to experience Westmoreland. To start on the college pathway early is another way in which Westmoreland is serving the community and helping in the development of the County's youth. We offer high school students the chance to take classes on our main campus, online, or at one of our multiple centers in Westmoreland County and the surrounding counties of Fayette and Indiana. By participating in Early College, students have the opportunity to take courses that fit their interests and begin to experience all that college life at Westmoreland can offer.

Another on ramp for students seeking higher education is Early College. Early College fills a desire that some students have to get moving early and follow a set course. Early College packages the career pathway and with transferable credits. Students can start working towards a degree, certificate or diploma while still attending high school. For the student who wants to get a jump start on their career, this is a great step and part of our pathways to education for high school students.

Overall, these programs are designed to help students on ramp at any point during high school when their desire calls for an expansion of their education.