



**Pennsylvania House of Representatives
Select Subcommittee on Technical Education and Career Readiness**

**Testimony by
James L. Smith, M.B.A.
President, Economic Growth Connection of Westmoreland
and
William H. Kerr, Ed.D.
Chairman, Westmoreland County Forum for Workforce Development
Superintendent of Schools, Norwin School District**

**March 18, 2016
Allegheny Conference Center
11 Stanwix Street, 17th Floor
Pittsburgh, PA 15222**

Pennsylvania House of Representatives
Select Subcommittee on Technical Education and Career Readiness
Testimony by
James L. Smith, M.B.A.
President, Economic Growth Connection of Westmoreland
and
William H. Kerr, Ed.D.
Chairman, Westmoreland County Forum for Workforce Development
Superintendent of Schools, Norwin School District
March 18, 2016

Good Afternoon!

My name is James L. Smith, and I have served as President of the Economic Growth Connection of Westmoreland County since January 2013. Our primary mission is supporting the creation and retention of quality jobs in Westmoreland County and the region. My background includes e-commerce studies at Carnegie Mellon University, an MBA from Indiana University of Pennsylvania, and a finance degree from West Virginia University.

Today, I'd like to highlight the work of an innovative group that is bringing together leaders in K-12 education, postsecondary institutions, government, foundations, and leading businesses and industries to address the so-called "skills gap" and "skills mismatch" to improve workforce quality and economic development in the knowledge and technology based economy.

The reality check of these "skills issues" is two-fold: (1) what happens when the people in the labor pool lack the skills to do what the market demands for business and industry; and (2) a problem in which many young adults are graduating from college with large debts but not in-demand skills that can help them earn a sustaining wage.

In 2014, under the auspices of the Economic Growth Connection of Westmoreland, the Westmoreland County Forum for Workforce Development was launched by several business - education leaders who envisioned greater connections among education, workforce quality, and economic development.

The business – education leaders of Westmoreland County decided to move beyond the "status quo" by helping to re-invent public education. We are strategically positioning students for college and career pathways of success by building public-private partnerships for more learning opportunities in the knowledge and technology-based economy. The Westmoreland County Forum for Workforce Development is in the process of building an exemplary public-

private model to promote 21st century learning and to develop a world-class organization in a global economy.

Background about Westmoreland County Forum for Workforce Development

The mission of the Workforce Forum is to connect business and education through coordinated opportunities, which will improve workforce quality and economic development. The Forum's work focuses on college and career pathways for post-secondary education and training; programs of study; effective teaching and learning; and building business – education partnerships.

The business – education leaders believe that Technical Education and Career Readiness is an integral part and driver of economic growth and will help produce a stronger middle class through expanded learning opportunities for high school students, connections to post-secondary education and training, and better outcomes to meet the needs of business and industry. Further, we believe there is a synergy taking place in Westmoreland County that is consistent with the various regional and state-wide studies that are connecting education, workforce quality, and economic development.

The priority goals of the Workforce Forum include:

1. Changing the regional culture to support Career Education and Work Standards.
2. Creating a sustainable infrastructure that aligns educational resources to respond to economic and community opportunities.
3. Developing a replicable county model based on the Pennsylvania Career and Education Work Standards.

The Workforce Forum works collaboratively with the Westmoreland Intermediate Unit; the 17 School districts in Westmoreland County; the Economic Growth Connection of Westmoreland; the Eastern, Central, and Northern Westmoreland County Career and Technology Centers; the Westmoreland-Fayette Workforce Investment Board; the Westmoreland County Industrial Development Corporation; the Westmoreland County Chamber of Commerce; and five higher education institutions, including Westmoreland County Community College, Penn State New Kensington, the University of Pittsburgh at Greensburg, St. Vincent College, and Seton Hill University.

Regional business-education partnerships are at the heart of expanding student learning opportunities for real-world experiences and internships that promote research, innovation, and entrepreneurship. Through a formal Charter Declaration, all participating entities have agreed to provide the necessary leadership in cooperation with County-wide stakeholders to ensure K-12 career awareness, exploration, preparation, and development programs for students with an understanding of the high-demand occupations including, but not limited to: energy, engineering and technology manufacturing; business, finance, and information technology; health, education, and human services; homeland and international security; national and

international government agency services; and environmental education, protection, and safety.

The Forum has a strong desire to better address the regional workforce quality needs of business and industry and to improve communication and collaboration between education and business entities for meeting the needs of the new economy. Plans are underway for developing and implementing policies and procedures to strengthen business-education partnerships, which will ensure expanded educational opportunities and internships for all student populations.

The Workforce Forum is committed (1) to promoting business-education partnerships by facilitating and leading student internships, job shadowing, e-mentoring, apprenticeships, and work-based learning programs; and (2) to working with all stakeholders associated with basic and post-secondary education and training and certification programs for business and industry.

New Regional Asset: The Advanced Technology Center

In Westmoreland County, there is a regional asset which is a new career and technology facility that is shaping a better future for Westmoreland County, its people, and its workforce. Responding to the demographic challenge of an aging and declining population, education and industry leaders are answering the call for action for a highly skilled workforce in Westmoreland County.

Known as the Advanced Technology Center (ATC), it is the newest school within the Westmoreland County Community College system that is promoting 21st century advanced manufacturing education and training.

As background, the ATC officially opened for students in August 2014, offering education and training in the high-demand fields of Applied Industrial Technology, Mechatronics, Energy technologies, Design technologies, Machining and Fabrication, Additive Manufacturing, Welding, and STEM. It is located inside 73,500 square feet of space at the former Sony Technology Center manufacturing plant, making it a tremendous story of repurposing a vacant site for community benefit. It is one of only six schools in Pennsylvania to have received the distinction of being named to the M-List of the Manufacturing Institute, which validates that the ATC is preparing students to manufacturing industry standards.

In cooperation with Westmoreland County Community College, the Workforce Forum is finalizing a College and Career Pathways model which is focusing on a Cross-Curricular Certificate Program for High Schools, known as the STEM Education Workforce Partnership. This model was built on a national framework, but is customized to meet the workforce needs of Westmoreland County and Southwestern Pennsylvania.

Articulation agreements between Westmoreland County Community College and respective high schools are an example of connecting our students with post-secondary institutions. The model was co-designed by K-12, postsecondary, and industry partners to provide students

with a seamless transition from high school to credential to career. At its core are ten global competencies infused across the curriculum of the five career clusters and 11 pathways.

During the last 18 months WCCC has seen approximately 1,000 students participate in the dual enrollment offering. This dual enrollment option can have significant impact on the cost students will incur with respect to post-secondary education expenses. Some students are graduating from high school with nearly 30 college credits; and, I note that this effort presents an opportunity for some students to eliminate a full year of undergraduate work while in high school.

High School students will also benefit from the Advanced Technology Center's state-of-the-art equipment and instruction, linkages to employers, value-added articulation agreements, stackable certificates and a solid preparation to pursue a technical degree. Our desire is to have CTC students experience educational field trips to the Advanced Technology Center to complete project-based learning by working in teams; to apply what they learn by working with information; and to create new ideas and solve real-world problems. It is anticipated that students will work hand-in-hand with their respective teachers and WCCC instructors and with mentors from business and industry on authentic projects.

Conclusion

In light of tightening and uncertain state budgets, there is a need to have a "cooperative and collaborative" strategy at the county or regional level to address workforce needs of the business and industry market economy in the Pittsburgh region. Westmoreland County leaders recognize the Commonwealth's lack of resources; therefore, Westmoreland County has taken the necessary steps and has demonstrated leadership by thinking outside the box and by working together for progress in the knowledge and technology-based economy.

In recent years, education initiatives have advocated for a strong desire to graduate every student college and/or career ready. To make this a reality, key stakeholders must understand the importance of educating youth and equipping students with the necessary 21st century skills as well as evidence-based predictors of post-secondary school success, such as career awareness, internship and community experiences, and career and technical education. Engaging business and industry through face-to-face collaboration and communication through websites for accessing step-by-step information to advance real-world internships for our students are high priorities for the Workforce Forum.

Key stakeholders in the business education community must continue to develop, expand, and evaluate transition programs to support initiatives that meet the needs of students to improve post-school outcomes. The collaborative decisions made among key stakeholders will have implications for secondary graduates to leave high school prepared for post-secondary education and gainful employment. This, in turn, will have a profound and beneficial impact on society at local, state, and national levels.

In conclusion, the Westmoreland County Forum for Workforce Development is in the process of building an exemplary public-private model to promote 21st century learning and to develop

a world-class organization in a global economy. Technical Education and Career Readiness is an integral part of that process.

As business – education leaders, our highest priority is to motivate our students as the future leaders and workers of tomorrow. By enhancing our students’ knowledge, skills and abilities, they will have the best opportunities and a competitive edge for meaningful and gainful employment in the future.

Again, thank you for the opportunity to provide testimony today to the Select Subcommittee about leadership and governance involving schools, economic development, and business - education partnerships; as well as comments about regional and local coordination of participating school districts and the engagement of businesses across the Westmoreland County.

[DR KERR TO SPEAK]

Good Afternoon!

My name is William H. Kerr and I serve as Chairman of the Westmoreland County Forum for Workforce Development and also I am Superintendent of Schools for the Norwin School District which serves Westmoreland and Allegheny Counties. I am a graduate of Duquesne University’s program in Educational Leadership, and also of the University of Pittsburgh’s program in Administrative and Policy Studies.

Thank you for the opportunity to offer testimony about the importance of Technical Education and Career Readiness throughout the Commonwealth of Pennsylvania. I am particularly excited to be here today because I have been seeing these trends and issues develop over time from a unique vantage point. In addition to being a K-12 Superintendent, I served on the Board of Directors for the Armstrong County Industrial Development Authority for 12 years, and I also served Lenape Technical School as Superintendent of Record for multiple terms during a 15-year period.

The Westmoreland County Forum for Workforce Development believes that there is a strong correlation between the quality of our schools and the quality of our communities. We also believe an investment in education is an investment in the economic vitality of the region and bodes well for steady progress and economic prosperity for our schools and communities.

As more high-tech businesses and industries expand or locate in the region, there is a greater need for educated, well-trained “gold collar” workers who have a strong academic background, sophisticated technical skills and a personal commitment to excellence. Therefore, Technical Education and Career Readiness is central to the economic growth and expanded learning opportunities for high school students, connections to post-secondary education and training, and to the high-demand occupations of business and industry now and in the future.

My part of the testimony today will address Technical Education and Career Readiness as it relates to (1) Engaging Business across Westmoreland County; (2) Student and parent awareness; (3) Relevance and rigor; (4) Access; and (5) Assessment.

Engaging Business across Westmoreland County

The Workforce Forum is in the process of building a broad-based, regional or county approach so that business and industry cross the academic boundaries of local education agencies. Establishing County-wide criteria for internships and apprenticeship programs for all participating businesses will provide a standardized process of procedures and documents across Westmoreland County.

That process will identify ways to connect best practices which will create opportunities for all students in Westmoreland County. If school districts, career and technical schools, post-secondary education, and business - industry entities all work together, the possibilities for expanded and coordinated educational opportunities are unlimited.

To emphasize an earlier point, the Workforce Forum is committed (1) to promoting business-education partnerships by facilitating and leading student internships, job shadowing, e-mentoring, apprenticeships, and work-based learning programs; and (2) to working with all stakeholders associated with basic and post-secondary education and training and certification programs for business and industry.

County-Wide Internship Program

By further engaging business and industry, the intent is to standardize a county-wide internship/apprenticeship program. This standardization coupled with a central hub or clearing house (i.e. The Workforce Forum) would give students (as well as businesses) a one-stop shop to identify and best understand what is expected during the internship process and give businesses a consistent message with respect to required clearances and liability. This would also minimize the chance of businesses being approached by multiple districts that might have conflicting expectations or requirements.

In addition to business and industry representatives serving on Occupational Advisory committees (OACs), educators must work collaboratively (1) to build public-private partnerships that promote the importance of Technical Education and Career Readiness; (2) to ensure multiple career and post-secondary pathways are available to all students; and (3) to expand the use of business and industry representatives as evaluators to score student performance tests such as the National Occupational Competency Testing Institute (NOCTI). Specifically, there is a need to enhance working relationships between and among education, business, and industry representatives to increase mutual understanding of needs. Further, there is a need to expand the use of professional social media applications, such as STEM Premier, to increase student profiles with schools, business, and industry.

STEM Premier (stempremier.com) is an interactive platform for college and career opportunities and allows students to showcase their talents and abilities. In simple terms, STEM Premier creates the online version of a "baseball card" for students, listing their "stats"

and areas of interests. This enables students to showcase their abilities and achievements to prospective business and industry employers and postsecondary institutions, and also to learn about scholarship opportunities and internship openings. Key stakeholders want to increase student and school/district usage of STEM Premier student profiles. In addition to increased student and school district use of STEM Premier, business-education leaders want to increase use by business and industry and post-secondary institutions as a platform to develop professional connections among students, businesses, and postsecondary institutions.

Student and Parent Awareness

The Education Policy and Leadership Center (EPLC) has identified a key barrier to our progress in a study they released in February 2016 titled *HIGH SCHOOL CAREER AND TECHNICAL EDUCATION: Serving Pennsylvania's Student and Workforce Needs*.

The EPLC notes that the "image" issue is central to improving the effectiveness of the state's Career and Technical Education system to serve the needs of students and workforce. Therefore, there is a strong desire to implement a statewide public awareness campaign that promotes the importance of career and technical education and the multiple career pathways available to all students, specifically promoting Technical Education and Career Readiness opportunities.

Through Pennsylvania K-12 Career Counseling 339 Plans and Career Education and Work Standards, an improved flow of information in the primary grade levels and greater school district accountability is needed to ensure that the plans and standards are effectively communicated and implemented. To that end, more student and parent tours/visits to CTC's and the use of current and former CTC students speaking to motivate and better inform potential recruits are highly recommended. Highlighting CTE successful students, sharing award-winning stories, and producing authentic DVD personal interviews will bring more attention to the "skills gap" and "skills mismatch" in response for the need of a highly skilled workforce. Speaking about value-added certifications and the high-demand occupations of the future through career awareness and exploration can be best accomplished through increased career counseling and the benefits of Career and Technical Education.

An effective College and Career Pathways should be supported by expanded online resources and information on key stakeholder websites to highlight the broad-based benefits of Technical Education and Career Readiness. Working with parent groups and Chambers of Commerce for business expos and career-sponsored days and increased School District participation in STEM-related student activities and competitions will better inform parents and students about Career and Technical Education and the Advanced Technology Center, in this case, specific to Westmoreland County.

Educators want to offer students and businesses a way to collaborate and engage in project learning and doing; theory and application; and applied academics and business. And, business-education leaders want to provide high-tech environments with open work spaces for team-building and skill development in critical thinking, collaboration, communication, and creativity. The interaction among school districts, career and technical centers, and the

Advanced Technology Center is a winning combination for student engagement and expanded learning opportunities; better informed parent awareness and understanding; and business-education collaboration and partnerships.

Relevance and Rigor

School districts certainly have the responsibility to promote students' academic success, but must find a better balance between relevance to the workforce, career preparedness, and post-secondary transition vs. preparing students to score well on State-mandated academic standardized testing.

School districts need to do a better job of promoting the Pennsylvania Academic Career Education and Work Standards and Technical Education and Career Readiness, including an earlier start with elementary-aged students for a better understanding of career and college pathways. As an example, implementing elementary field trips as early as grades 5 and 6 to the Career and Technology Centers will produce dividends for career awareness and exploration.

As outlined in the Education Policy and Leadership Center's statewide study, expectations should be established that all students, including those in CTE programs, will demonstrate the same academic proficiencies and complete the same assessments provided in state regulations for high school students; and, further, that CTE students be required to complete one or more NOCTI exams and earn industry-related credentials that demonstrate competencies beyond the regular high school diploma. Without question, all CTCs should have modern, high quality, and rigorous Career and Technical Education programs challenging students and preparing them with experience and skills that will serve them well in continuing education and the workplace.

As stated previously, Westmoreland County school districts have articulation agreements between school districts and career and technical centers and post-secondary institutions for postsecondary credits and dual-enrollment opportunities congruent with potential career possibilities including postsecondary credits (see Exhibit #1, Local Agreements by Program). It is important to emphasize that High-Priority Occupations (HPO) programs at CTCs should go through a regular review, evaluation, and revision of CTE programs that lead to gainful and purposeful employment. Mandatory revision of K-12 Career Counseling 339 Plans every two years will help demonstrate that the plans are a "living, breathing" document to be consistent with the ever-changing workforce demands.

SOAR Programs Helping Students

In our county, Westmoreland County Community College is the primary institution participating in the Pennsylvania Department of Education SOAR program. SOAR (Students Occupationally and Academically Ready) programs offer qualifying students advanced credit(s) with partnering postsecondary institutions in aligned CTE programs. There are 18 SOAR agreements that WCCC has signed which are active. Credits awarded via SOAR agreements are valid for 3 years from the student's high school graduation.

SOAR programs can help students:

- Prepare for entering the job market with college and career ready skills
- Choose the best career pathway
- Save money on college tuition
- Save time by not duplicating coursework in college

In most of the counties WCCC serves, the secondary schools which offer SOAR programs are housed at local Career and Technology Centers. These Career and Technical Education programs of study include a statewide articulation agreement between secondary schools and postsecondary institutions. SOAR is built upon Programs of Study developed by the Pennsylvania Department of Education (see Exhibit #2, Statewide Articulation Agreements by Program).

In Westmoreland County, every effort is made to ensure effective coordination is demonstrated among all relevant Career and Technical Education providers and stakeholders; and, further, that expanded learning opportunities and greater access is provided to real-world experiences through shadowing, apprenticeships, internships, co-op and summer employment opportunities in the workplace.

Access

A high-priority goal for school districts is to provide access, equity, and opportunities for all students, not just traditional CTC students who typically have strong applied academic skills. By connecting traditional academic students to technical skill sets that complement their knowledge and college/career interests and aspirations, the needs of business and industry can be better achieved in a knowledge and technology-based economy.

In addition to the information shared thus far, here are a few additional examples of value-added benefits related to Technical Education and Career Readiness in Westmoreland County:

- (1) Central Westmoreland Career and Technology Center has initiated a Workforce Development Education Opportunity (WDEO) for teachers, counselors, and administrators to tour/visit the CTC for expanded professional development opportunities to promote awareness and benefits of Technical Education and Career Readiness. This activity is designed to discover the length and breadth of the educational opportunities for Workforce Development and gain a better and relevant understanding of Career and Technology Education as an opportunity to contribute to Workforce Development and extend that understanding for student access and equity in programming. The purpose of the plan is: to acknowledge the collective efforts of the K-12 Comprehensive Guidance Plans that have been undertaken by the districts and CWCTC; to enhance the understanding of CTE to academic teachers at respective local education agencies; and to provide facility tours and specific academy classroom visits.

- (2) There are exploratory measures underway with the Westmoreland County Community College. These include preliminary discussions for real-world student learning experiences through cooperative and expanded course offerings, field experiences, and project-based learning opportunities at the Advanced Technology Center. The cooperative partnerships among school districts, career and technical centers, and the community college create a winning combination for all students. Preliminary discussions include an Advanced Technology Center Academy for High School students; examination of transportation, logistics, and technology to overcome existing barriers; working with local education associations at all school districts through meet-and-discuss sessions; and solutions to address the barrier of clearances with business and industry for expanded mentorships and internships (including parent and student consent sign-off forms for participation).

- (3) The ACE Mentor Program is a program that's making a positive impact in Westmoreland County. The ACE Mentor Program of America, Inc., (ACE stands for Architecture, Construction, and Engineering) helps mentor high school students and inspires them to pursue careers in design and construction. It's now the construction industry's fastest-growing high school mentoring program, reaching over 8,000 students annually. ACE not only engages sponsors and volunteer mentors to expose students to real-world opportunities, it financially supports each student's continued success through scholarships and grants. Coordination of the Westmoreland County program is a collaborative initiative headed by the WCCC Advanced Technology Center and interested school districts and career and technology centers beginning with the 2016-2017 school year.

Educators need to do a better job of alignment between and among school districts, CTCs, and post-secondary education to create common courses leading to relevant business and industry pathways for students with assurances of equity and access, including a scope and sequence of career objectives and adequate resources.

By thinking outside of the box, high school students should have opportunities and flexibility for students to attend Career and Technology Centers for specific course interests without having to be a formally enrolled full-time student at the CTC. Further, as previously discussed, flexibility in student scheduling and opportunities for educational student field trips to the Advanced Technology Center to complete project-based learning by working in teams will go a long way towards taking advantage of a regional asset in Westmoreland County.

Assessment

As you are aware, the NOCTI (National Occupational Competency Testing Institute) is Pennsylvania's recognized test for career and technical students and is similar to the state-required PSSA and Keystone Exams for academics.

Educators are committed to helping students improve both academic and technical skills at Eastern, Central, and Northern Westmoreland County Career and Technical Centers,

specifically offering additional help and support for any student wishing to improve his/her grades and/or occupational scores. Most technical programs take a pre-NOCTI assessment at the end of their junior year or at the beginning of their senior year to gauge what areas they still need to improve upon. All students at the Career and Technical Centers typically take this end-of-program assessment as part of their graduation requirement at the conclusion of their senior year.

CTE programs are evaluated based on state performance measures and standards. CTE students who score at or above the prescribed benchmark on the written and performance sections of a NOCTI test may receive the Pennsylvania Skills Certificate. Students who take one of the other PDE approved tests are also eligible to earn a Pennsylvania Skills Certificate based on approved assessments and certifications of industry specific groups.

My comments on NOCTI are of particular importance. Not all employers and industry partners are familiar with NOCTI, nor do they understand the value of the Pennsylvania Skills Certificate. As NOCTI becomes more and more prevalent, key stakeholders are striving to educate local employers of its significance (although not all technical areas take a NOCTI exam).

From my professional experiences, educators are serious about bridging the gap between education and career preparedness and workforce development, noting that there are continuous efforts to further enhance standardized assessments to better compare and contrast data. NOCTI assessments include, but are not limited to: “Hands-on” as well as cognitive skills; demonstration of acquired skills by completing actual jobs using the tools, materials, machines, and equipment characteristic of a specific career field/occupation; demonstration levels of conceptual and procedural knowledge for a complete picture of acquired skills; and assessment of technical skills at the occupational level. NOCTI provides valuable feedback for program improvement based on industry representatives’ observations during project-based assessments and the assessments measure factual as well as theoretical knowledge.

In addition to NOCTI, there is one area of possible improvement for Westmoreland County schools, and that would be to host a discussion about a county-wide consensus among school districts to directly accept CTC assessment/grading rather than using a conversion scale (different for various districts) which may “de-value” CTE grades and perpetuate the stereotype that CTE is less than the grade reports of traditional academic programs.

Conclusion

In conclusion, K-12 public education at its best is the number one key component to strengthening the regional workforce and creating a strong economy. Considering the knowledge and technology-based economy in which we live, Technical Education and Career Readiness is an integral part of preparing students for the high-demand occupations in the global economy now and in the future. The Westmoreland County Forum for Workforce Development is a shining example of business – education leaders working together for

progress to help address the “skills gap” and “skills mismatch” through collaboration and cooperative ventures, making sure that high school graduates are college and career ready.

Again, thank you for the opportunity to address the Select Subcommittee on Technical Education and Career Readiness in the effort to ensure the Commonwealth of Pennsylvania is at the forefront of excellence in education.

ABOUT THE PRESENTERS

James L. Smith

Mr. Smith serves as President & CEO of the Economic Growth Connection of Westmoreland. The Economic Growth Connection (EGC) is the private sector leader in economic development for Westmoreland County, with a primary mission of creating family sustaining jobs for the residents of the county. During Smith's tenure, he has helped to finance over \$1 billion dollars' worth of projects, impacting well over 25,000 jobs.

During Smith's tenure as President, EGC has made workforce development and education a major area of focus. EGC's Board of Directors consists of leaders of industry and education, including the Presidents of all five higher education institutions in Westmoreland, and two superintendents of schools. The interaction that has occurred between business and education has highlighted the importance of the need of a workforce that is educated, skilled and aligned with the jobs available in the region.

He has earned a Certification in Strategies for E-Commerce from Carnegie Mellon University, a Master of Business Administration from Indiana University of Pennsylvania, and a Bachelor of Science in Business Administration-Finance from West Virginia University.

Smith is a resident of Greensburg and is married with three children.

William H. Kerr

Dr. William H. Kerr is in his 21st year as a superintendent of schools and in his sixth year as Superintendent of Schools for the Norwin School District, which serves Westmoreland and Allegheny Counties.

Bill earned a Bachelor's of Science degree in elementary education from Slippery Rock State College; a Master's of Science degree in education from Duquesne University; and a Doctorate in Education from the University of Pittsburgh.

Bill served as a Visiting Fellow with the Department of Administrative Policy and Studies, School of Education, University of Pittsburgh, in Fall 2007 to study the relationships among education, workforce quality, and economic development. His fellowship focused on business-education partnerships, career pathways to jobs of the future, STEM Education, and the integration of academics, career education, and technology.

Bill serves on the Executive Committee for the Western Pennsylvania Forum for School Superintendents and serves on the Board of Directors for the Economic Growth Connection of Westmoreland County. Bill is Chairman of the Westmoreland County Forum for Workforce Development.

EXHIBITS

Exhibit 1: Local Agreements by Program

Exhibit 2: Statewide Articulation Agreements by Program

Exhibit 3: Additional Resources

Local
Articulation
Agreements by
Program

Art Institute of Pittsburgh	CCAC - Community College of Allegheny County	Career Training Academy	Dean Institute of Technology	Empire Beauty School	ITT Technical Institute	Johnson College	Kaplan Career Institute ICM Campus	Laurel Business Institute	Penn Commercial	Pittsburgh Technical Institute	Thaddeus Stevens College of Technology	Triangle Tech	University of Northwestern (Ohio)	WCCC - Westmoreland Co Comm College
-----------------------------	--	-------------------------	------------------------------	----------------------	-------------------------	-----------------	------------------------------------	---------------------------	-----------------	--------------------------------	--	---------------	-----------------------------------	-------------------------------------

47.0603	Automotive Collision Technology										X		X	
47.0604	Automotive Technology	X											X	
46.9999	Construction Trades			X								X		
46.0201	Carpentry											X		
50.0402	Commercial & Advertising Art	X												
11.0201	Computer & Information Science													X
12.0401	Cosmetology				X				X					
12.0508	Culinary Arts													X
46.0399	Electrical Technology			X					X			X		X
10.0399	Graphic Design Technology	X								X				X
51.0899	Health Occupations Technology			X				X	X	X				
47.0201	Heating & Air Conditioning			X					X			X	X	X
1.0601	Horticulture		X											X
46.0408	Painting & Decorating Trades	X												
48.0501	Machine Trades Technology													X
46.0101	Masonry										X			
52.0203	Logistics & Materials Management						X							
48.0508	Welding			X										X
46.0502	Plumbing	X												
46.0303	Powerline													X
43.9999	Protective Services							X						
15.0303	Robot Engineering/Electronic Tech.					X				X		X		X
51.0899	Sports Therapy & Exercise Sci.													

Statewide Articulation Agreements by Program

47.0603	Automotive Collision Technology	-Pennsylvania College of Technology	-Thaddeus Stevens College of Technology
47.0604	Automotive Technology	-Commonwealth Technical Institute	-Community College of Allegheny County
62.0203	Logistics & Materials Management	-Johnson College	
48.0501	Machine Trades Technology	-Westmoreland County Community College	-Delaware County Community College
15.0303	Mechatronics / Electronic Technology	=Community College of Allegheny County -Westmoreland County Community College -Clarion University of Pennsylvania	-Delaware County Community College -Harrisburg Area Community College -Thaddeus Stevens College of Technology -Johnson College -Northampton Community College
48.0508	Welding	-Westmoreland County Community College	-Community College of Allegheny County -Delaware County Community College
46.0201	Carpentry	-Commonwealth Technical Institute	
46.9999	Construction Trades	-Harrisburg Area Community College	
46.0399	Electrical Technology	-Rosedale Technical Institute -Orleans Technical Institute	-Harrisburg Area Community College -Johnson College
47.0201	Heating & Air Conditioning	-Westmoreland County Community College	-Community College of Allegheny County -Delaware County Community College
1.0601	Horticulture	-Pennsylvania College of Technology	Harrisburgh Area Community College
46.0101	Masonry	-Thaddeus Stevens College of Technology	
46.0408	Painting & Decorating Trades	-Local Articulation with Art Institute of Pittsburgh	
46.0502	Plumbing	-Community College of Allegheny County	-Thaddeus Stevens College of Technology
46.0303	Powerline	*Local Articulation with Westmoreland County Community College	
50.0402	Commercial & Advertising Art	-Pennsylvania College of Technology	
11.0201	Computer & Information Science	-Westmoreland County Community College -Arcadia University	-Peirce College
12.0401	Cosmetology		
12.0508	Culinary Arts	-Bucks County Community College -Montgomery County Community College	-Westmoreland County Community College -Community College of Beaver County
10.0399	Graphic Design Technology	-Commonwealth Technical Institute	
51.0899	Health Occupations Technology	-Westmoreland County Community College	-Greater Altoona Career & Technology Center -Commonwealth Technical Institute -Career Training Academy
43.9999	Protective Services	-Westmoreland County Community College	-Community College of Beaver County -Harrisburg Area Community College -Lackawanna College
51.0899	Sports Therapy & Exercise Science	-Pennsylvania State University	-St. Francis University -Alvernia University

Exhibit 3: Additional Resources

House Resolution No. 102, Session of 2015

Establishing the select subcommittee on Technical Education and Career Readiness

February 2015

The General Assembly of Pennsylvania

Direct link to document:

<http://www.legis.state.pa.us/cfdocs/legis/PN/Public/btCheck.cfm?txtType=PDF&sessYr=2015&sessInd=0&billBody=H&billTyp=R&billNbr=0102&pn=0567>

HIGH SCHOOL CAREER AND TECHNICAL EDUCATION: Serving Pennsylvania's Student and Workforce Needs

February 2016

Education Policy and Leadership Center

www.eplc.org

Direct link to report:

https://www.eplc.org/wp-content/uploads/2016/02/CTC_Report_final_EPLC.pdf

Governance and Funding Reform for Career and Technical Centers in Pennsylvania

January 2011

University of Pittsburgh Institute of Politics

www.iop.pitt.edu

Direct Link to report:

<http://www.iop.pitt.edu/documents/Status%20Report%20Governance%20and%20Funding%20Reform%20for%20CTCs%20Jan%202011.pdf>

Career and Technical Education in Pennsylvania

February 2005

JOBS for the Future

www.jff.org

Direct link to report: <http://www.jff.org/sites/default/files/publications/CareerTechEdinPA.pdf>