

Lancaster County Career and Technology Center

Testimony to the House Appropriations Committee on Career and Technical
Education

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Submitted by

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We appreciate the opportunity to address the impact that Career and Technology Education (CTE) can have on workforce development, as well as to identify some concerns that directly impact the career and technology schools throughout Pennsylvania. We are certainly willing to be part of the solution, and we offer our time and expertise in any way you might find helpful in addressing these concerns.

Thank you for your interest and support in the work done at the Lancaster County Career and Technical Center (LCCTC). We are very proud of our staff and students, and we take great pride in their accomplishments, including the recent recognition by Forbes Magazine as a leader in career and technical education.

We recognize that career and technical education (CTE) is at the forefront of discussions of student success. We also recognize that we are on the cusp of many opportunities for our students that can impact our communities and our society. We welcome those opportunities, and we are ready to face the accompanying challenges. Your support in the legislature will be a great assistance in our efforts to offer options and opportunities to our youth, and to provide support for workforce investment.

Impact of Workforce

Career and technology education focuses on preparing students for successful careers and lifelong learning so that they can enhance our nation's workforce competitiveness on a global level. Programs reflect greater emphasis on higher-level academics, postsecondary education preparation, 21st Century skills development, and curriculum aligned to nationally recognized business and industry credentials. CTE graduates must be equally prepared for success as a credentialed technician as well as success in postsecondary education/college without the need for academic remediation. CTE graduates must truly be career and college ready.

To ensure high quality programs that meet the needs of local business and industry, Lancaster County Career and Technical Center meets the requirements of PDE, the expectations of our 16 sending school districts, as well as the academic and credentialing requirements of Carl D. Perkins grants. LCCTC partners with local business and industry through advisory structure framework that engages business, industry and community stakeholders in the support, advice and guidance of all aspects of career and technical education. Every program has an occupational advisory committee (OAC) of 5-8 industry-specific committee members who inspect the program site, equipment, and curriculum and skill list to ensure students going through the program exit ready to enter the workforce. In addition, a General Advisory Committee (GAC), comprised of leaders in local businesses and industries, provides guidance and accountability to LCCTC overall programming – both on the secondary and post-secondary level.

LCCTC students participate in relevant work-based learning where they engage in paid or unpaid internships or cooperative education. LCCTC students also can earn advanced standing in local community colleges through dual enrollment by receiving college credits through articulation agreements. Students going through SOAR programs can enter community colleges and technical schools with almost a semester worth of college credits.

Partnerships with Business and Industry that Impact Workforce Development

LCCTC works closely with business and industry partners to provide training, education and opportunities for students to best prepare them to positively impact the workforce.

Pennsylvania CareerLink: Pennsylvania CareerLink is a valued partner with the LCCTC. The Workforce Development Board and CareerLink partner with LCCTC to identify High Priority Occupations and possible trainees for those programs. The LCCTC provides excellent training opportunities through short-term and full-time programs, as well as associate degree programs.

Manufacturing Day: With over 3000 manufacturing businesses in Lancaster County, they have created an experience that introduces and engages high school students and high school teachers into the world of manufacturing. Manufacturing Day is an initiative that enables students from all 16 Lancaster County school districts and their teachers to tour a manufacturing site and see first-hand what the responsibilities, skill set and environment of manufacturing workers are like. Last year almost 400 students toured the various departments of **High Steel Industries**. This year, **Case New Holland** will host the visitors. Ms. Janel Cross, Manufacturing Day Committee Chairperson, spends many hours in outreach and public appearances promoting this opportunity.

The manufacturing industry recognizes the need to recruit, and through engagement of the local school districts and the LCCTC, is working hard to address the inevitable skills gap in the field. The number of retirees in manufacturing already outpaces the number of students in present programs. Taking into account growth in the field, which will increase the need for employees, the skills and labor gap is critical.

Intermediate unit 13, Office of Vocational Rehabilitation and The Jay Group are working with LCCTC through the development of a Materials Handling and Logistics Transition Program, focusing on providing students with an all-inclusive educational experience focusing on vocational, employability, and independent living skills. The instructional program is provided in a team-teaching environment with a special education teacher, general education instructor and job trainer working together to provide classroom learning and on-site experience through a "Projects with Industries" setting.

The **Lancaster County Career and Technical Center Foundation** provides economic support for equipment, student tuition and fees, as well as program development. They recently received a matching grant from **BB&T Bank** that enabled them to finance the student cost and some equipment to begin Precision Machining and Advanced Welding courses. Both of these are high priority areas, and the placement rate from the first two graduating classes has been extremely high. Both of these programs provide economically struggling men and women with the opportunity to go right into jobs with family-supporting wages. That is good for the families, and it is good for the workforce.

Lancaster County Chamber of Commerce is increasingly providing support and facilitating connections between LCCTC and local business and industries. Just this year, networking through Chamber events has resulted in several partnerships and additional committee members for our Occupation Advisory Councils. The Chamber is a key partner in the STEM Alliance of Lancaster County. The STEM Alliance has partnered with LCCTC in a number of projects and support for several programs to engage students in meeting the needs in the areas of resource management, engineering, and manufacturing.

We have specific business partnerships that provide not only job opportunities but financial and capital support for our programs. For example, **Worley and Obetz** is working closely with the students in our Building Constructions program in developing a STEM-focused traveling tiny house that will be designed and built by LCCTC students in conjunction with planning and curriculum from the STEM-Alliance, sponsored by Worley and Obetz. This will be a marketing opportunity for W&O that creates a real-life

work opportunity for our students and a sustained STEM mobile educational lab for students throughout Lancaster County. That type of partnership shows the real impact that career and technical education can have on our workforce development. In fact, industry partners have been engaged in over 20 real-life projects with LCCTC students, providing actual experience to students but also providing recruitment opportunities to industries.

The partnerships and opportunities for students are essential aspects for CTE students to positively impact the workforce needs in our county and our state. But there are issues that need to be addressed to make the effort more successful.

Issues Facing CTE's Ability to Impact Workforce Development

- **Funding**

Funding for LCCTC comes primarily through the 16 local school districts that support it. Statewide, Carl D. Perkins federal funds account for only three percent of funding for CTEs, and that is comparable for the funding provided to the LCCTC. State Career and Technical Education Subsidy provides approximately \$49 million per year, which accounts for about 8% of CTE revenues. This subsidy, which equates to about \$700 for each student enrolled in a PDE approved CTE program, has not been increased in over 8 years. So, the majority of funding comes from the local school districts. State funding for public education, therefore, indirectly impacts CTEs.

Guidelines for the current method of funding CTCs were determined in the mid-1960s by the state department of education. The template for articles of agreement for AVTSs (now CTCs) created by PDE identified two costs incurred by CTCs: 1) capital costs, funded by local school districts based on their tax assessed value, and 2) annual operating costs, determined by average daily membership at the CTC. The template for operating costs created a pay-for-use calculation. The local districts often find themselves looking for ways to reduce expenditures, and, too often, pass-through expenses, such as CTC tuitions, become targets. With the emphasis on all districts implementing career education K-12, this creates a tension between the need for CTCs as a critical tool to meet the state mandate to school districts for career education, and the cost of sending students to the CTC for career training. In the end, the economic reality results in the student losing opportunities.

The CTC is not a taxing institution, and as such is not subject to Act 1 caps. However, the sending school districts are restricted by the Act 1 calculation, and the CTC is limited not to exceed the increase imposed upon the sending districts. The CTC budget must be approved by the majority of sending districts, each of whom has already established their budget priority related to the Act 1 cap. If their view is that they will remain below the cap, then the CTC is expected to stay below that level as well. However the requirements of business and industry and the regional workforce demand modernized CTC equipment and programs. These demands often require more funding than can be generated by the limitations on annual budget increases.

PDE provides competitive equipment grants for up to \$100,000 per CTC, and that funding has made a significant difference in developing and equipping CTC programs. However, the amount is far less than what is needed for modernizing some of the more equipment-intensive programs such as manufacturing and other high demand occupations. At LCCTC, that subsidy may allow the purchase of one piece of equipment for the 60+ programs we run.

The Pennsylvania Legislature has also provided supplemental funding in the amount of \$3,000,000 for CTE instructional equipment. This funding provides additional resources to address critical equipment needs that were not included in instructional budgets due to budget limitations. This additional support is appreciated, but, to positively impact the workforce, greater financial support is needed. The programming and the equipment is costly and the needs are ever-increasing.

Looking for additional state funding would be an easy request, although not likely to result in action due to the other financial and budgetary demands the state is facing. However, this is a time to look at creative solutions that would create incentives for partnerships between businesses/industries and CTCs. Local industries could provide necessary equipment and subsidize programming in areas that would provide workers in their areas of need. The state could match the funds provided by local business and industries, which would add revenue to the CTCs without being totally dependent upon the state. If the state could provide additional tax incentives to businesses and industries who make direct contributions to the purchase of equipment or providing needed resources to high-priority occupation programs, that could provide a steady, consistent revenue stream.

There are many avenues that could be explored in this area, and it would be worth the time of establishing a committee or commission to do that.

- **Funding to local school district directly impacts LCCTC funding**

The secondary-level program for Career and Technical Centers, particularly the Lancaster County Career and Technology Center, is dependent upon the contribution of sending school districts. The LCCTC must be cognizant of the issues that all 16 districts face when LCCTC develops its budget and negotiates its Collective Bargaining Agreement (CBA). In other words, the LCCTC cannot operate as an independent entity, but rather is influenced by conditions that any or all of the sending districts face. As difficult as it is for traditional public schools to determine their budget due to lack of certainty of funding from the state, the LCCTC has an even greater lack of certainty because it must get a commitment from the sending districts long before they are able to commit to their own local taxes and budget decisions.

1. As a pass-through budget item, CTC budget is impacted by district funding pressures
2. Budget Increase must be in line with district budget increase (percentage of a small number is a small number)
3. CBA negotiations is impacted by 16 school district negotiation status
4. Reduction in funding from local districts to LCCTC is less visible (or volatile) than reduction in funding for in-district programs (such as art or music)
5. Anything that impacts the funding to local districts (such as property tax reform) could potentially impact pass-through funding, such as CTC funding, unless protected like the charter school funding is protected.

- **State funding for career and technology education has been flat funded for almost a decade**

Funding for Career and Technical Centers is heavily dependent upon local funding streams. The federal Perkins Grants accounts for a very small portion of the funding for LCCTC, yet the requirements of the federal grant impact many of the decisions. At the state level, funding has been flat for 8 years. Grants

support some equipment updates, but the cost across the state far exceeds the available funds, which are competitively allocated. That puts the lion's share of the burden on local school districts. This is a pass-through expense, so it does not impact programs that most people see. In addition, legislative mandates, such as Act 339, require the career and technical centers to provide more programs and address the career interests of more students, without any additional funding to the CTC's or the local districts to support this.

1. There is minor, less than 3% funding through the federal Perkin Act grants
2. State funding, approximately \$49 million, has not increased in eight years. However, enrollment in the LCCTC has continued to grow to where we are almost at capacity this year.
3. The majority of funding comes from the sending districts.
4. The LCCTC works closely with its education foundation and seeks out grants, including PDE grants, to support the necessary upgrading of equipment, but the funding is not reliable enough for annual budget decisions.
5. Act 339 requirements have many districts relying on LCCTC to provide a key component of their plan. This could increase enrollment and program expectations, but does not increase funding which is so critical to accomplish these expectations

- **Vocational Certification in Pennsylvania**

Hiring staff for a Career and Technical Center presents unique challenges. Anyone applying for a position to teach at a CTC must have at least two full-time wage-earning years in the field. Most applicants have been in the field for a while and are looking for an outlet that provides the satisfaction that teaching provides. At a certain point in his or her career, an applicant's salary will surpass that offered by a CTC for a teaching position. As a result, many applicants are taking a pay cut to teach. While there are many advantages to teaching over working in the field, the cost-benefit analysis is impacted by the certification requirements to teach. We fully recognize that any new instructor must learn teaching strategies and pedagogy, but the present requirements for Pennsylvania appear excessive in preparing a person to be successful in the classroom:

1. Hiring classroom teachers is difficult due to the differential between work in the field and CTC salary
2. Candidates required to have at least two-years' full-time wage earning experience in the field
3. Best candidates have much longer than that, increasing the differential between salary for field work and the salary for teaching.
4. The role changes from tradesperson to educator, so skill set and education expectations change which require additional education and training, but the requirements for Pennsylvania are much more arduous than other states.
5. Currently, CTE educators are required to attain 78 credits for certification. These credits, often acquired through 21 or more courses, do not necessarily result in an additional degree. (See Appendix A, B and C)
6. The courses required do not all relate directly to increasing the instructor's skills in curriculum, instruction or classroom management.
7. Other states have models that might be worth exploring (e.g. Maryland, Virginia, Wisconsin)
8. Most credit hours are reimbursed by the CTC. The length of time required to attain Vocational I and Vocational II certification often significantly diminish the Return on Investment (ROI). (See Tuition Reimbursement chart below)

Here are some of the Tuition numbers broken down for faculty based on the number of years employed. The highest average tuition reimbursements for instructors occurs during years 7 & 8 (as they are cramming to earn the Voc II). The average total cost for a teacher over the course of the first 8 years from employment to Voc II costs the school around \$37,767. The last table shows the total reimbursement paid out for the last 3 years.

Years Employed	Average Tuition Reimbursement to Faculty
Years 1-2	\$ 4,022.69
Years 3-4	\$ 9,690.97
Years 5-6	\$ 11,890.78
Years 7-8	\$ 12,163.00

Average Cost to district in tuition over first 8 years for a teacher	\$37,767.44
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Year	Total Tuition Cost reimbursed to faculty
2014	\$ 122,633.00
2015	\$ 111,753.00
2016	\$ 94,237.65

Instructor turnover at LCCTC, reflecting not only the loss in the investment of tuition reimbursement, but also the loss of expertise and experience in the classroom:

- 12 teachers have departed in last 3 years.
- 10 of 12 within the first 4 years of teaching (5 after year 1)

Getting and Staying Certified to Teach

Congratulations! You were hired to teach an occupational program at your local school. Now you have to meet the state legal requirements to earn the Pennsylvania vocational instructional certificates.

Although Penn State University faculty and staff will help you through the process, it is your responsibility to learn what the requirements are, keep track of what certificate you have and when it will expire, and do what is necessary to keep your teaching certificate active.

Good luck with your new career!

The links below are presented in the order one most likely would follow. However, individual circumstances vary and one may find their situation indicates a different order.

Occupational Competency Assessment

Pennsylvania law requires that you demonstrate your competence in the area you plan to teach. You must have at least 4,000 hours of paid work experience in the subject you will teach and take the Occupational Competency Assessment (OCA). Once you have completed the OCA you should apply for an Intern Certificate at the [TIMS website](#) at this address:

New Teacher Workshop - WF ED 100 Orientation to Teaching

Are you ready for the first day of school? What are you going to teach? What are your responsibilities? How do you handle a classroom of adolescents? How will you teach students who learn differently than you do? You need a starter course about the basics of teaching.

Vocational Emergency Permit

Sometimes new instructors must begin teaching before the OCA is scheduled. The Commonwealth allows people to do so if they apply for and receive a Vocational Emergency Permit. Please note that the Vocational Emergency Permit expires after only one year.

Vocational Intern Certification

You must successfully complete the Occupational Competency Assessment before you can apply for the Vocational Intern Certificate. The Commonwealth makes this certificate available to allow you to teach while you are learning how to teach. Accordingly, this certificate is good for

only three years, which means you must make consistent progress toward completing the requirements for the next certificate, the Vocational Instructional I certificate.

Vocational Instructional 1 Certification

Teaching requires different skills than the skills that make you an effective teacher. You will learn fundamental teaching skills when you take 18 credits of required university courses (including the two credits for the New Teacher Workshop). Much of the courses will be a student teaching experience, in which you learn how to teach under the guidance of a Penn State instructor. You must complete these courses and two national teacher competency exams (called CORE PRAXIS) successfully to earn the Vocational Instructional I certificate. Then you can apply for the Vocational Instructional I Certificate. The temporary Vocational Instructional I certificate will expire in six years.

Vocational Instructional 2 Certification

You must complete 60 more required credits to earn the final certificate you need to teach a technical program in a Pennsylvania public school – the Vocational Instructional II certificate. Some of those credits are in your major (WF ED) and other courses are in subjects outside WF ED. Your advisor will tell you what courses you need to take. Penn State offers the WF ED courses at six locations in Central Pennsylvania: Lancaster, Lebanon, Lycoming, Mechanicsburg, and University Park. You can take the other required courses at Penn State or their approved equivalents at any accredited university, college, or community college.

Appendix B



**Field Based/Competency Based Teacher Certification
Program Overview
Vocational I Certification
Information for 4-year College Graduates**

Welcome to Temple University!

Vocational I Certification is designed to serve individuals who are hired as secondary education career and technical teachers directly from business or industry with little or no previous preparation as teachers.

The program is individualized and organized around planned activities. These activities take place on a weekly basis in a regional professional development center and the intern teacher's own classroom. The Temple University professional staff coordinate's these activities to provide intern teachers with rich experiences in developing specialized teaching skills.

Below is a guide to assist you in the proper steps to follow during your journey of becoming a successful Career and Technical Education Teacher. In addition, you will be assigned a Field Resource Associate (FRA) to your school who is dedicated in mentoring you through the process. Please email Nancy Johnston if you any questions Nancy.Johnston@temple.edu or (215) 204-8376. We look forward in working with you!

Sequence	Undergraduate (Does not currently hold a bachelor degree)
Step 1	Apply for Emergency Certificate with your school and attend mandatory informational session through Temple Call Joane Majors for registration information 215-204-6025.
Step 2	Register and Pass the OCA both Written and Performance (Registration packets provided at information session or contact Joane Majors for electronic copies)
Step 3	Apply for Intern Certification (Contact Nancy Johnston, 215-204-8376)
Step 4	Register for Pre-Induction Workshop/first course (CTE 3103) *At this point you are eligible to take either ENG comp or SPED and advised to do so if hired in the middle of the school year.
1 st Semester	(CTE 3103 (Temple))
2 nd Semester	FRA will advise which course is in sequence (CTE 3101,3102, ED 2296) (Temple) (Intermediate Performance Assessments, IPA)
3 rd Semester	FRA will advise which course is in sequence (CTE 3101, 3102, ED 2296) (Temple) (Intermediate Performance Assessments, IPA)
4 th Semester	Final course , FRA will advise which course is in sequence (CTE 3101, 3102, ED 2296) (Temple) (Councilors of Educators Review, COE) (Speech Assessment-Conducted by FRA)
Additional Courses Required and can be taken any time	English Comp (Community/Temple)
Additional Courses Required and can be taken anytime	Special Ed (Temple-online)
Take and Pass PRAXIS I	Praxis I (Reading and Writing, Core Academic skills for Educators Reading test #5712. Writing test #5722. Passing score Reading 148, passing score Writing 158. An average of both scores 153 or better is passing.
TotalCredits/Certification	18 Credits/VocationalI



Associate Degree in Workforce Education and Development

The Pennsylvania State University
COLLEGE OF EDUCATION

**WORKFORCE EDUCATION AND DEVELOPMENT
ASSOCIATE IN EDUCATION DEGREE REQUIREMENTS (60 Credits)**

Student: _____
PSU ID Number: _____ E-Mail: _____
Advisor: _____

I. GENERAL EDUCATION COMPONENTS 21 Credits	II. REQUIREMENTS FOR THE MAJOR 23 Credits	III. ELECTIVES 16 Credits
Select appropriate course listed in the General Education Bulletin. Note the General Education courses may not be taken SA/JUN (pass/fail).	Integrated Curriculum Implementation (WFED 105) _____ (3)	Introduction to Industrial Training (WFED 270 or WFED 441 and 442) _____ (3)
WRITING/SPEAKING (GWS) - 6 Credits	Program and Facilities Management (WFED 106) _____ (3)	Vocational Education for Special-Needs Learners (WFED 413) _____ (3)
English Composition () _____ (3)	Assessment Techniques (WFED 207W) _____ (3)	Training in Business and Industry (WFED 471) _____ (3)
Public Speaking () _____ (3)	Leadership Competencies for Supervisors (WFED 310 or WFED 323) _____ (3)	Project Management for Professionals (WFED 403) _____ (3)
QUANTIFICATION (GQ) - 3 Credits	Occupational Safety and Health for Prof. (WFED 411) _____ (3)	Leadership Competencies for Professionals (WFED 410) _____ (3)
Math 034 or Stat 200 () or equivalent _____ (3)	Cultural Diversity in the Workplace (WFED 450 or INSYS 100 or STS 245 or equivalent) _____ (3)	Learn-Sigma for Professionals (WFED 451) _____ (3)
NATURAL SCIENCES (GN) - 3 Credits	Instructional Internship in Industrial Training (WFED 495D or 495C) _____ (5)	Occupational Work Experience (WFED 395A, WFED 395B, WFED 395C, WFED 395D) (up to 6 per semester, 12 maximum)
Physics () or Chemistry () or Biology () or Anatomy and Physiology () _____ (3)		Independent Study (WF ED 296) _____ (1-9)
HUMANITIES (GH) - 3 Credits		
History () _____ (3)		
SOCIAL AND BEHAVIORAL SCIENCES (GS) - 6 Credits		
ECON 014 () or equivalent _____ (3)		
EDPSY 014 () or equivalent _____ (3)		