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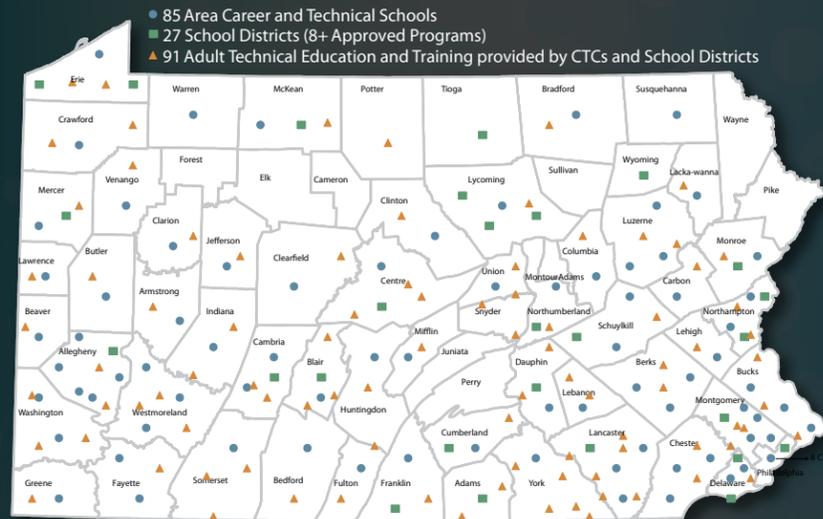
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SECONDARY CAREER AND TECHNICAL EDUCATION DELIVERY SYSTEM



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PENNSYLVANIA CTE *Best Practices Initiative*

Pennsylvania provides a critical state investment of approximately \$62 million in funding for CTE, including some funding for competitive equipment grants, adult training and high school reform efforts including teacher preparation.¹

Pennsylvania supports 85 career and technical centers, 141 school districts and 44 postsecondary institutions offering Career and Technical Education. These career and technical centers, colleges, universities and private postsecondary institutions offer over 2,100 secondary approved programs, over 1,000 postsecondary programs and over 500 adult programs.

To strengthen the impact of the state's investment, the Pennsylvania Department of Education is implementing a multi-faceted improvement plan. This plan addresses critical issues facing career and technical education in Pennsylvania, including workforce development and academic preparation.

For more information on Pennsylvania CTE and the Best Practices Initiative, visit the Pennsylvania Department of Education – Bureau of Career and Technical Education website at: www.pde.state.pa.us/portal/server.pt/community/Career_&Technical_Education/7335/

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¹ Pennsylvania Area Career and Technical Education Schools 2009 Report

CASE STUDY

LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER

WITH CAMPUSES IN BROWNSTOWN, MOUNT JOY, AND WILLOW STREET, PA



LCCTC'S KEY STRATEGIES AT-A-GLANCE

- **Instructors integrate literacy** and numeracy strategies to strengthen student understanding.
- **The Response to Instruction and Intervention program** addresses challenges to learning through ongoing coaching, counseling and peer support.
- **Instructors create formal teaching plans** that detail how lessons will be implemented to maximize student learning.
- **Administrators and instructors engage** in peer-to-peer learning opportunities to model and reflect on effective teaching strategies.
- **The performance-based evaluation model** is used to partially determine salary increases for administrators.
- **An extensive adult education program** serves post-secondary education and training needs in the community while providing sustainability to secondary CTE programs.

THE PENNSYLVANIA CTE BEST PRACTICES INITIATIVE IS DOCUMENTING THE PROMISING PRACTICES THAT PENNSYLVANIA CAREER AND TECHNICAL EDUCATION ADMINISTRATORS AND TEACHERS ARE UTILIZING AS THEY WORK TO IMPROVE PROGRAM QUALITY AND STUDENT RESULTS.

PENNSYLVANIA CTE
Best Practices Initiative

Introduction



Established in 1970, Lancaster County Career and Technology Center (LCCTC) is a full-time senior delivery model career and technology center (CTC) that provides career and technology education (CTE)

to 1,356 students across its three campuses (Brownstown, Mount Joy, and Willow Street). The CTC serves 16 sending districts. Each of the 39 CTE programs provided at LCCTC is offered at only one LCCTC campus, except for cosmetology, which is offered at all three campuses. Students select which campus to attend on the basis of their program preference. (For purposes of this case study, *center* will be used when referring to all three LCCTC campuses collectively. When a reference is made to an individual campus, the term *campus* or the campus name will be used.)

LCCTC offers its CTE programs to students who attend the CTC for full days during their senior year. Students who attend LCCTC have completed all of their general education requirements at their home schools. When the CTC first opened, it operated on a traditional half-day schedule. During the 1986–1987 school year, LCCTC switched to its current senior-only structure. The leadership team believes LCCTC benefits from having more mature students and fewer behavior management issues because of its enrollment structure. The leadership team also observes that a senior-only student body makes extensive partnerships with adult education programs more feasible and effective.

In addition to the full-day CTE programs for seniors, LCCTC also offers six half-day CTE cluster programs for 11th grade students who are identified as requiring extra support to ease their transition into a full-time program during their senior year. Every campus offers the same six clusters.

During the 2007–2008 school year, the Mount Joy campus piloted the “Super Tech” program, which targets at-risk students. In collaboration with four school districts, the program provides an opportunity for students to begin attending the CTC in 9th grade. (This program is described in more detail later in the report.)

In addition to the secondary CTE programs, LCCTC operates a large adult education program that serves an estimated 2,500–3,000 students each year

between CTE program enrollment and testing services. According to the leadership team, the scale of the adult education program and the revenue it raises improve the quality of LCCTC’s programs and help to sustain the programs for LCCTC’s secondary students. LCCTC is governed by a Joint Operating Committee (JOC) that includes one representative from each of the sending school districts.

LCCTC leadership team members include the executive director, assistant executive director, director of curriculum, and the supervisor of student services. The leadership team serves all three campuses of LCCTC. In addition, a principal and an assistant principal are assigned to each campus. Since 2008, the leadership team has assumed greater responsibility “to work together and make things consistent across” the three campuses. In particular, the team focuses on creating and implementing one set of policies across the three campuses. To help further ensure consistency, the campus principals collaborate so that they are sharing the same information and implementing the same staff expectations.

Across the three campuses, LCCTC employs 71 instructors, three instructional coaches (one per campus), one full-time English as a Second Language (ESL) instructor (Willow Street), two part-time ESL instructors (Brownstown and Mount Joy), an instructional aide (Willow Street), and a career education and work instructor (Willow Street).

Approximately 82 percent of students at LCCTC are Caucasian, 11 percent are Hispanic, 5 percent are African American, and 2 percent are Asian. Students with individual education plans (IEPs) account for 40 percent of the student population.

In 2009, after receiving approval from the superintendents and the JOC, LCCTC joined the Technical Assistance Program (TAP), which is sponsored by the Bureau of Career and Technical Education. A Pennsylvania Department of Education initiative, TAP provides technical assistance to help schools focus on improving student achievement. The program emphasizes student performance in math and reading on the Pennsylvania System of School Assessment (PSSA) and on the National Occupational Competency Testing Institute (NOCTI) assessments. According to the leadership team, the approval and strong support from the governing body for participation in TAP allowed LCCTC to fully implement the program and to create a structured TAP plan for school improvement.

LCCTC builds upon its strong organizational and leadership foundation to make progress and implement effective change that focuses on improving program quality and student achievement.

Key Improvement Strategies for Pennsylvania CTE

ABOUT THE PENNSYLVANIA CTE BEST PRACTICES INITIATIVE

The Pennsylvania CTE Best Practices Initiative, carried out by the Meeder Consulting Group in partnership with the PDE-BCTE, is documenting the strategies used by CTE programs to create standards aligned systems and to support those systems with people, processes and partnerships. All of these strategies are aligned to the goal of increasing academic and technical achievement among students.

Leaders and teachers in Career and Technical Education (CTE) programs that improve are very intentional about achieving student success. They thoughtfully develop a Standards Aligned System, and support that system with people, processes and partnerships to deliver results.

Pennsylvania has adopted the SAS (Standards Aligned System) as a comprehensive approach to improvement of student achievement across the Commonwealth. The SAS model is supported by six elements: Clear Standards; Interventions; Materials and Resources; Instruction; Curriculum Framework and Fair Assessment.

More information about the SAS Model can be found at www.pdesas.org.

✓ CREATE A STANDARDS ALIGNED SYSTEM

Instruction

- Integrate literacy and numeracy strategies into CTE
- Build relevance through cross-curricular linkages

Intervention

- Provide extra help to strengthen academic and/or technical skill achievement
- Deliver personalized student support and guidance

Curriculum Framework

- Create a standardized and aligned curriculum

Fair Assessment

- Use assessment results to target instructional strategies

Clear Standards

- Create standards for all CTE Majors (established by the Pennsylvania Department of Education Bureau of CTE (PDE-BCTE))

Materials and Resources

- Offer materials and resources to CTE schools and programs (provided by PDE-BCTE, and through the Technical Assistance Program and the CTE Best Practices Initiative)

✓ SUPPORT A STANDARDS ALIGNED SYSTEM

People

- Build a culture of targeted and ongoing professional growth
- Center teacher evaluation within a culture of professional growth
- Develop a cohesive team

Processes

- Be intentional and systemic about change
- Make program and instructional decisions based on data

Partnerships

- Cultivate relationships with community, business and industry partners



STANDARDS ALIGNED SYSTEM Instruction

Integrate Literacy and Numeracy Strategies into CTE

During its first year in TAP (2009), LCCTC focused its improvement efforts primarily on the integration of literacy strategies with the intention of increasing this focus to include numeracy strategies the following year. This focus on integration was a major component of the annual “Professional Development and Student Achievement Plan Including Technical Assistance Program Activities” that is submitted to the JOC for approval. The plan outlines specific goals and expectations for staff members, professional development opportunities, and strategies to help improve program quality and student performance.

Administrators expect that the use of this plan will aid in consistent integration across all CTE program areas. In order to meet this expectation, they have implemented several key supports, including:

- Professional development,
- Instructional coaching,
- Formalized lesson planning, and
- Literacy and math assessments.

Professional Development

To support instructors in their efforts to integrate literacy and numeracy strategies, the leadership team provides extensive professional development on an ongoing basis. During the 2009–2010 year, professional learning opportunities focused almost exclusively on integrating literacy strategies. LCCTC leadership and instructional staff members provide much of the professional development during a

series of structured monthly meetings. The leadership team organizes the staff meetings to foster peer-to-peer learning opportunities as well as to ensure that instructors implement the strategies on which they receive training.

- Staff Development Meetings
At each staff development meeting, the instructional coach presents five to six integration strategies to administrators and instructional staff members. Instructors are expected to implement one of the strategies. Each campus runs its own staff development meeting, but the three coaches all present the same strategies.
- Faculty Meetings
One week after the staff development meetings, the principals conduct a faculty meeting at their campus. During these sessions, the principals model how to use one of the literacy strategies presented earlier by the instructional coach. (The principals at each campus present the same strategy.) The leadership team believes that instructors are more willing to attempt integrating literacy and numeracy strategies when they observe their supervisors learning along with them.
- Center Meetings
Instructors from across all three campuses meet with their program cluster colleagues. During these meetings, they share their successes and challenges in implementing particular literacy strategies.

The plan outlines specific goals and expectations for staff members, professional development opportunities, and strategies to help improve program quality and student performance.

As LCCTC expands its focus to include numeracy strategies, the structure of the monthly meetings will change to reflect the individual needs of staff members. Because numeracy strategies cannot be generalized as readily as literacy strategies can be, the instructional coaches will present at each center meeting in order to provide instructors with numeracy strategies that are tailored specifically to their CTE program.

Instructional Coach

LCCTC employs an instructional coach at each campus to provide job-embedded support to instructors and to help them strengthen their integration strategies. As previously discussed, the instructional coach presents several integration strategies during monthly staff meetings. In addition to providing school-wide professional development, the instructional coach also works with instructors on a voluntary and individual basis to provide them with guidance and resources. The coach helps instructors to develop integrated lesson plans, observes in their classrooms, and provides them with feedback on their lessons. As one instructor noted, the instructional coach is an “instructional cheerleader” and assists in making instructors more comfortable with and more willing to try integration strategies.

Formalized Lesson Planning

The LCCTC leadership team emphasizes that professional development alone will not ensure that instructors integrate literacy and numeracy strategies. As a means to bridge the potential gap

between professional learning and actual application of these strategies across CTE programs, the LCCTC leadership team established specific lesson plan requirements (which are described later in this case study). Instructors must submit one formal lesson plan each month to their supervisor. The lesson plan should incorporate both a literacy and a numeracy strategy.

The coach helps instructors to develop integrated lesson plans, observes in their classrooms, and provides them with feedback on their lessons.

Supervisors are required to use a rubric developed by LCCTC to score and provide feedback on each submitted lesson plan. Using a scale from zero (“Beginning”) to three (“Exemplary”), the rubric evaluates the extent to which the lesson addresses literacy and numeracy skills and the reading and math eligible content of the PSSA. (“Eligible content” refers to those standards that are assessed by the PSSA.)

In addition to submitting formal lesson plans that document integration strategies, instructors also are required to present students with a math problem of the week to solve. To strengthen student writing skills, instructors also must require students to write at least three sentences on a daily basis.



By requiring instructors to incorporate integration strategies into their lesson plans on a regular basis, the leadership team helps to ensure that integration is a sustainable and embedded practice at LCCTC.

Literacy and Math Assessments

In 2009, LCCTC began to administer the Renaissance Learning STAR assessment four times a year to measure reading and math achievement of students. (The use of this assessment also provides documentation for how LCCTC is meeting the requirements of the Carl D. Perkins Career and Technical Act of 2006 regarding the improvement of student academic and technical skills. Since LCCTC only serves 12th grade students, the 11th grade PSSAs are not a relevant measure of student academic attainment.) STAR performance data are reported to instructors for all the students in their CTE program as an aggregate, rather than by individual student scores. Each instructor uses the aggregated data about the students they teach to make adjustments in their instructional strategies as they relate to literacy and numeracy skills.

To facilitate appropriate student enrollment at LCCTC, the guidance staff created a detailed program guide that lays out the expectations, regarding both academic skills and technical skills, that students will need to meet in order to succeed in a given program.

**STANDARDS ALIGNED SYSTEM
Intervention**

Provide Extra Help to Strengthen Academic and/or Technical Skill Achievement

To meet the learning needs of students with IEPs, LCCTC implements practices to ensure these students are appropriately placed in CTE programs according to their strengths and needs and that they receive sufficient learning supports within their programs.

Skills Alignment Chart

To facilitate appropriate student enrollment at LCCTC, the guidance staff created a detailed program guide that lays out the expectations, regarding both academic skills and technical skills, that students will need to meet in order to succeed in a given program. This guide, known as the Application and Skills Alignment Guide, provides information to help students and their parents make informed choices and helps the student to understand the level of effort that will be expected in a specific program. This is particularly important should the student have a particular learning impairment.

Special education coordinators at the sending schools use the guide to facilitate appropriate student enrollment at LCCTC. According to the

guide, the information is presented to prospective students to provide them with “concrete information regarding the commitment required for their academic and career successes” at LCCTC. The LCCTC guidance staff collaborated with learning support teachers from Lancaster-Lebanon Intermediate Unit 13 (IU) to develop the guide. (An IU is a regional educational services agency that provides educational services to participating school districts in Pennsylvania.)

According to the guide, the information is presented to prospective students to provide them with “concrete information regarding the commitment required for their academic and career successes” at LCCTC.

For each CTE program area, the guide includes a skills alignment chart that details the following information:

- Program safety and physical considerations;
- Recommended vocational testing levels on the SAM (Skills Assessment Module) evaluation;

- Reading and language arts levels;
- Math levels;
- Length of daily lecture time;
- Amount of homework;
- Tasks covered each week;
- Frequency of tests;
- Academic content; and
- Study skills.

For each of these skills, the chart includes space to record a student’s present educational level and learning support needs. The sending school counselors review and complete the skills alignment chart with parents and students. On the basis of the information noted on the chart, an informed decision can be made regarding the extent to which a program is an appropriate fit for a student. The information on the alignment chart also helps to guide the IEP process and is shared with LCCTC.

Deliver Personalized Student Support and Guidance

LCCTC operates several programs to support students and help them address barriers to learning. These programs focus on providing ongoing intervention and guidance to students.

LCCTC STUDENT SUPPORT AND GUIDANCE PROGRAMS		
Name of Program	Campus	Grade Levels Served
Cluster programs	All campuses	11th grade students
Super Tech pilot program	Mount Joy	10th–12th grade students
Response to Instruction and Intervention	Willow Street, Brownstown, and Mount Joy (beginning 2010–2011)	12th grade students



Cluster Programs

To help students who may experience challenges transitioning to LCCTC for their senior year and to raise awareness about its CTE programs, LCCTC developed cluster programs. The cluster programs are offered to 11th grade students on a half-day basis for the full academic year. Approximately 450 students participate in the cluster programs. (To enroll students in the program, the sending districts submit applications for students they believe would most benefit from the program.) Many of the cluster program students have IEPs and participate in the programs as a means to help prepare them for the full-day CTE programs in their senior year. (Some districts only support IEP students, because non-IEP students may not meet graduation requirements if they attend the cluster program for a half day during their junior year. Other districts support regular education as well as special education students, depending on the number of credits students need for graduation.) At each of the three campuses, six cluster programs are available to students:

- Construction,
- Culinary,
- Health Care,
- Manufacturing,
- Transportation, and
- Visual Communications.

Rather than focusing on one particular program, each cluster offers a comprehensive introduction to a group of programs that address similar technical knowledge and skills. During the program, students engage in career introduction activities and begin to learn technical content related to the programs in their cluster.

Super Tech Pilot Program

In collaboration with four sending districts, the Mount Joy campus operates the Super Tech pilot program to provide ongoing interventions to at-risk students. Students identified for the program typically are “disengaged” but are not necessarily struggling academically.

Students enroll in the Super Tech program as 9th graders. Enrollment is limited to 24 students per Super Tech class, for a total of 48 students. (Enrollment is evenly divided across the four participating sending districts.)

During their first year in the program, students attend Mount Joy for a half-day program that includes extensive career guidance. Beginning in their 10th grade year, students attend the program on a full-time basis and complete both their CTE and academic coursework at Mount Joy. As 11th graders, students are accelerated into the full-time CTE program. Once they enter their senior year, participants may elect to complete another CTE program, participate in a co-op, or enroll in dual-enrollment courses.

The leadership team believes that by identifying at-risk students at an early point in their high school careers and by then engaging them in meaningful learning through CTE, the Super Tech program motivates students to complete high school.

Rather than focusing on one particular program, each cluster offers a comprehensive introduction to a group of programs that address similar technical knowledge and skills.

Response to Instruction and Intervention Program

The Response to Instruction and Intervention (RTII) is an assessment and instructional framework endorsed by the Pennsylvania Department of Education (PDE) to “enable early identification and intervention for students at academic or behavioral risk.”

After an analysis of student referral data indicated that special education students accounted for 75 percent of the discipline referrals and yet accounted for just 40 percent of the student population, the LCCTC leadership team focused on RTII as a means to more effectively address concerns regarding student behavior and discipline. The leadership team realized that instructors might have been referring a greater number of special education students because they did not fully understand how a student’s identified disability affected classroom behavior or how to best accommodate the student’s learning and emotional needs. The leadership team uses RTII to “to benefit these students and keep them in the classroom” and to provide professional development to instructors on how to better understand IEPs and student disabilities.

If instructors have concerns about students related to student engagement, classroom performance, or behavior, they may refer the students to the RTII team. For example, students with inappropriate behaviors, poor attendance, or low grades may be referred. On the referral form, instructors

must document the “problem behavior” and the interventions that have been implemented.

The RTII team comprises administrators, counselors, and learning support staff members. The team meets bi-weekly to discuss student referrals and to brainstorm appropriate interventions. There are three tiers of interventions used to address concerns, with each tier becoming more intensive. Tier I interventions are those universal strategies implemented on a center-wide basis. They include practices such as collaboration with sending schools to monitor student progress and career development instruction.

For the approximately 15 percent of students who need more targeted support, the RTII team implements Tier II interventions. Some of the students who receive Tier II interventions meet in a small group on a bi-weekly basis to participate in activities designed to strengthen their decision-making skills, improve their motivation and confidence, and address barriers to learning. A team consisting of administrators, counselors, teachers, and support staff members facilitates the group meetings and provides counseling and coaching to these students, referred to as Adventure Base Learners. (Tier II students who do not participate in these group meetings receive other interventions based on their individual needs.)



A typical session lasts for 90 minutes and includes employability training, team-building activities, and feedback sessions before concluding with a group lunch. The group sessions emphasize the importance of making sound decisions and teach students how to use their peers to help support one another. Students are teamed up with fellow group members on the basis of their needs and strengths.

For those students who require additional support, Tier III interventions are provided. Approximately five percent of the student population receives these interventions. Tier III is designed for the small percentage of students who need intense interventions and monitoring. Examples would include In-School Youth Programs, a one-on-one aide assigned to a student, or any intense monitoring.

The Willow Street campus piloted the RTII program during the 2009–2010 school year. The pilot expanded to the Brownstown and Mount Joy campuses for the 2010–2011 school year. The program objectives established for LCCTC include three RTII-related goals:

- All instructors and programs will participate in the RTII initiative.
- A decrease in the number of discipline referrals while increasing student achievement and attendance in the program.
- Additional attention should be placed on the number of discipline referrals issued to students with IEPs versus those issued to regular education students.

During the first year of the program at the Willow Street campus, the leadership team observed a sharp decrease in discipline referrals from about 80 referrals a month to approximately 20 referrals a month.

A typical session lasts for 90 minutes and includes employability training, team-building activities, and feedback sessions before concluding with a group lunch.

STANDARDS ALIGNED SYSTEM Curriculum Framework

Create a Standardized and Aligned Curriculum

The LCCTC leadership team emphasizes the importance of standardizing and aligning curriculum in order to improve instruction and student learning across CTE program areas.

To create aligned curriculums, instructors cross-walked their curriculum with the program of study, academic anchors, NOCTI standards, and careers in their fields. (The assessment anchors clarify the standards assessed on the PSSA, and they can be used to prepare students for the PSSA.)

The metaphor of an “anchor” is used to signal that the assessment anchors would anchor both the state assessment system and the curriculum/ instructional practices in schools. The leadership team provides classroom coverage for instructors so that they may use a full workday to collaborate with the director of curriculum in completing the cross-walk process. On average, instructors revisit the alignment process every three years.

Teaching Plans

The LCCTC leadership team wanted to ensure the curriculum alignment process did not simply exist on paper, but that it ultimately translated into effective lesson planning and instruction. To achieve this goal, they implemented a two-year-long process during which a voluntary Curriculum Committee comprising of instructors created a formalized teaching template. After the committee tested the teaching template and refined it, the leadership team required all instructors to use the template, referred to as the Teaching Plan, to plan and document their lessons. The Teaching Plan identifies eight key components of lesson plans that instructors must develop, and these components are explained in the document titled *Components of a Well Designed Teaching Plan*.

1. Define the **learning objectives**. Instructors are provided with a series of guided questions and action verbs to help them develop their objectives. They also are provided with a sample template they may use to write their objectives: *“The students will be able to (insert a verb) (insert the topic). This will be done by using (literacy strategies) and this will be demonstrated by (insert the assessment measure).”*

2. Identify the **materials** needed by the instructor and students to complete the lesson, including books, handouts, and equipment. Identify the **accommodations** necessary to meet the needs of diverse learners, including those with IEPs.
3. Develop the **Introduction/Anticipatory set**, which is a warm-up activity to informally **assess prior knowledge of students and activate their thinking** around the objectives. Instructors are provided with tips on how to create this section of the lesson.
4. Organize the **Lesson body/Input/Modeling** phase of the lesson during which instructors **“teach what they set out to teach.”** The **steps of the teaching process** should be outlined and **sample questions** should be included. This component should include a description of the instructional techniques and student activities to be used during the lesson.
5. Implement a plan to **summarize the lesson, check for understanding, and provide opportunities for guided practice**. The summary should provide closure for the lesson and remind students of the learning objectives. This phase of the lesson allows the instructor to determine whether students require additional practice or re-teaching.
6. Determine how **Assessment/Partnering** activities will be included in the lesson. According to *The Components of a Well Designed Teaching Plan*, “The assessment explains how the teacher will determine whether or **to what extent students met the learning outcomes** listed at the beginning of the lesson plan.” Instructors should reflect on the assessment results to plan for further instruction.



7. Plan an appropriate **time frame** for the lesson to allow students sufficient time to learn the stated objectives.

8. After the lesson, prepare to record **notes and reflect on the success** of the lesson.

The Components of a Well Designed Teaching Plan provides questions instructors may ask of themselves.

- What changes did I make during the lesson and why?
- What needs to be done differently if this lesson is taught again?
- What worked well?

Instructors cite several positive outcomes of using a formalized lesson-planning process. Once instructor noted that the process provides him the “chance to prepare and make teaching better for students.” Additionally, as another instructor noted, there is “no more winging it.”

According to the leadership team, the emphasis on aligning curriculum and developing formalized lesson plans improves program and instructional quality. LCCTC staff members now view curriculum as a comprehensive, standards-based system of learning modules and guides implemented through well-developed lesson plans rather than as a disconnected series of task lists. As the Career and Technical Distinguished School Leader (CTDSL) noted, LCCTC is “building a culture where solid planning is essential, and there’s a whole cadre of administrators focusing on that.” (CTDSLs are former CTC administrators who provide guidance to CTCs participating in TAP and help them identify strategies to improve student achievement.)

SUPPORT A STANDARDS ALIGNED SYSTEM With People



Build a Culture of Targeted and Ongoing Professional Growth

The leadership team and instructional staff at LCCTC value professional development as a resource to improve instruction and program quality throughout the CTC. Professional learning activities primarily focus on strategies related to TAP and to achieving LCCTC’s annual goals, such as improving student performance on the NOCTI technical skills assessments and increasing the integration of literacy and numeracy strategies.

The leadership team cites these peer-sharing opportunities as one of the strongest aspects of the professional development model.

For LCCTC staff members, professional learning opportunities include those provided by “external” experts, such as training sessions offered through TAP or Technical Centers That Work (TCTW). (The TCTW improvement model supports technical centers in setting high expectations for CTE students and establishing practices to ensure students are both college- and career-ready upon graduation from high school.)

A substantial amount of the professional development, however, stems from “in-house” experts, including instructional coaches, administrators, and instructors. The leadership team schedules peer-to-peer learning opportunities to encourage a collaborative approach to professional development.

Center-wide Approach

Professional development is implemented through a cohesive process that involves both the leadership team and the instructional staff. Often, leadership staff members and instructors participate in the same learning opportunities. For example, four teachers and an administrator from each campus attend all TAP training opportunities, as do the director of student services and the director of curriculum. As the director of curriculum stated, members of the leadership team are “constantly involved” with professional development. Their involvement demonstrates “a strong administrative support” for LCCTC initiatives and the need to engage in ongoing professional learning.

Peer-to-Peer Learning

Professional learning often is provided through a collaborative setting in which members of the leadership team and instructional staff share their professional knowledge and experience with colleagues. As discussed earlier in this case study, the leadership team established a structured series of monthly meetings to facilitate such peer-to-peer learning. During staff development meetings, instructional coaches present teaching strategies and then the principals model one of these strategies during the follow-up faculty meeting. Instructors value the information they receive during these meetings. One instructor noted, “Faculty meetings have more of an instructional focus rather than a procedural [focus].”

In addition to the staff development and faculty meetings, instructional staff members participate in

center meetings. During these meetings, instructors meet with their program cluster colleagues to share instructional strategies, as well as successes and challenges. The leadership team cites these peer-sharing opportunities as one of the strongest aspects of the professional development model. Peer-to-peer learning appears to foster buy-in from instructors for new learning initiatives. As the director of curriculum explained, “In the very beginning of our participation in TAP when we had teachers who weren’t sure this was the thing to do, we had teachers who were really excited and sharing some of the improvements they saw in students...the ones that weren’t quite sure got on board.”

Instructional Coach

The instructional coach provides job-embedded professional development and support to instructors through monthly staff development meetings as well as through one-on-one consultations. The coach trains instructors on effective instructional strategies and the use of data to make decisions about instruction. The coach also provides teaching materials and resources and observes lessons. Instructors credit the support provided by the coach with helping them adapt to new teaching expectations related to integration. They noted that the increased emphasis on integration and structured lesson planning “wouldn’t have gone as well” without the coach and that they “would have thought it was extra work” had the coach not provided them with the training and resources to be able to successfully adopt new teaching strategies.



Monitor Implementation

To ensure instructors implement what they learn through professional development sessions, the leadership team regularly conducts classroom observations. Observations typically occur as unannounced “five-minute walkthroughs” during which a leadership team member quickly evaluates a teacher’s lesson. The leadership team expects to observe evidence of specific instructional strategies, such as those that promote literacy and numeracy integration. Instructors note that the observations provide them with valuable feedback and make them more accountable.

The leadership team piloted this evaluation model in an effort to justify pay increases and to promote higher levels of administrator performance.

New Teacher Toolkit

To help support new instructors during their first year of teaching, LCCTC provides them with a resource toolkit. LCCTC modeled the new teacher toolkit on one that had been developed by the Massachusetts Department of Education. The toolkit includes information on:

- Effective teaching strategies,
- Classroom management,
- Tips “for surviving the first months of school,” and
- Practices and policies specific to LCCTC.

The Director of Curriculum meets with new instructors once a month to review components of the toolkit and to address their concerns.

Center Teacher Evaluation Within a Culture of Professional Growth

According to Executive Director David Warren, the leadership team “has raised the accountability of teachers and administrators” since he assumed the leadership position in 2009. As described earlier in this case study, the teacher evaluation process centers on formalized lesson planning and the effective use of instructional strategies, with a particular focus on the integration of literacy and numeracy strategies. Instructors must submit lesson plans for review and feedback from their supervisors. Supervisors coach and observe instructors on an ongoing basis to support their professional growth and to ensure they meet the instructional expectations held of them.

As of the 2010–2011 school year, LCCTC implemented a performance-based evaluation model for administrators. Under this new model, salary increases for administrators are based partially on performance. The leadership team piloted this evaluation model in an effort to justify pay increases and to promote higher levels of administrator performance.

Administrators are evaluated by their supervisors, and their final evaluation is submitted to the executive director for approval. The performance-based evaluation model uses three rating tools to evaluate administrators.

- **General Administrative Evaluation Form:** Used for all administrators, this form rates their performance along eight criteria using a scale from zero to nine. The criteria are: Professionalism; Planning and Decision Making; Organizing and Coordinating; Communicating; Motivating; Performance Monitoring and Evaluating; Professional Development; and Human and Public Relations.
- **Specific Administrative Area Criteria Evaluation Form:** Using a scale from zero to nine, this form rates administrators on criteria related to their specific job descriptions.
- **Performance Goals:** Administrators set three personal performance goals for themselves. They list activities that will help them to meet the goals.

Administrators also are held accountable for the extent to which the following LCCTC program goals are met:

- A minimum of 74.15 percent of students score at competent or above on the NOCTI assessments;
- Programs already scoring above the minimal level on the NOCTI assessments will have to raise scores or maintain them if already 90 percent of students or higher are scoring competent.
- STAR scores in math and reading will show an increase of 0.2 grade levels or more over the course of the school year. (Renaissance Learning produces STAR assessments, which are software-based standardized assessments.)

As Mr. Warren emphasized, performance-based evaluations for administrators is a “way of not just rolling out an initiative but supervising, monitoring and ensuring that we have accountability behind it.”

SUPPORT A STANDARDS ALIGNED SYSTEM With Partnerships

Cultivate Relationships with Community, Business and Industry Partners

CTE programs and students benefit from the strong relationships LCCTC sustains with community and business and industry partners. To help develop these partnerships, LCCTC established the non-profit Lancaster County Career and Technical Foundation, which assumes responsibility for marketing and raising community awareness of and support for LCCTC.

According to the foundation’s executive director, there is “a lot the foundation does to support the school, its teachers, programs and students.” It creates marketing materials with testimonials from business partners and former students, and it hosts an annual “Gold Collar Banquet” which celebrates the achievements of LCCTC graduates. Most significantly, the foundation has raised over \$3 million since its inception in 2003. Most of the funds raised are unrestricted, which allows for substantial flexibility in how they may be spent. The money is collected through a variety of sources, including not-for-profit organizations, private donors, and special fundraising events. For example, the foundation sponsored a local fly fishing tournament that raised between \$40,000 and \$50,000.



The foundation uses the funds for several purposes, such as:

- Equipment purchases,
- Student assistance in the form of uniforms, supplies, and testing fees,
- Construction of a child care center at the Mount Joy campus, and
- Scholarships.

In the 2009–2010 school year, the foundation awarded approximately \$20,000 in scholarships for post-secondary education and training to students based on merit and need.

As the foundation’s executive director noted and as its successful engagement of community partners suggests, the foundation board’s ongoing focus is to determine how the not-for-profit sector can be “directed to really support the students” at LCCTC.

Strengthen Relationships with Education Partners

Adult Education

According to the leadership team, LCCTC has a solid history of providing extensive adult education services to meet the needs of the community and the CTC itself. With approximately 2,500–3,000 adult education students a year enrolling in adult education programs and/or taking advantage of test administration services (for example, LCCTC is a third-party testing site for those wanting to test for their Commercial Driver’s License), LCCTC has the capacity to offer a large adult education program that buttresses the quality and sustainability of their secondary CTE programs.

Without a community college in the immediate area to provide CTE, in many ways LCCTC serves as a full-range education provider through its support and provision of extensive adult education programs. As Mr. Warren noted, “We’re basically looked at as if we are a community college.” LCCTC’s provision of adult education services fills a gap for community members seeking post-secondary education or training. It also serves as a business driver to help sustain LCCTC’s secondary CTE programs.

Most of the short-term programs are offered off-site at the neighborhood services centers, CareerLink offices, and public safety training centers in downtown Lancaster in an effort to make the programs more accessible to urban residents.

There are five different divisions within the adult education program:

- **Practical Nursing**
Serves as the largest licensed practical nursing program in Pennsylvania.
- **Commercial and Motor Vehicle Training Center**
Provides commercial driver’s license training, as well as driver’s education training for new drivers.
- **Financial Aid**
Provides financial aid services for LCCTC and five other CTCs.
- **Workforce Education Development**
Primarily works with business and industry to developed customized job training.
- **Postsecondary Education Division**
Administers short- and long-term programs, which currently lead to certifications. (As of the 2010–2011 school year, LCCTC had initiated the

application process to enable it to offer specialized associate degrees.)

LCCTC offers 12 full-time adult education programs and four short-term programs. In addition, if there are openings for the full-time programs in the secondary CTE course, adult education students may fill these slots. As of the 2010–2011 school year, 72 adult education students were enrolled alongside high school students in secondary CTE courses. Most of the short-term programs are offered off-site at the neighborhood services centers, CareerLink offices, and public safety training centers in downtown Lancaster in an effort to make the programs more accessible to urban residents. (Pennsylvania CareerLink is operated by the Department of Labor and Industry and provides training and education and youth services to residents.)

The adult education program annually averages \$1.5 million in revenues in excess of direct instructional costs. These revenues are used to support capital projects at LCCTC, such as facility renovations, and to cover program start-up costs.

THIS CASE STUDY WAS PREPARED BY HANS MEEDER AND MICHELLE HEBERT-GIFFEN OF MEEDER CONSULTING, LLC (WWW.MEEDERCONSULTING.COM), A FIRM SPECIALIZING IN LEADERSHIP AND ALIGNING EDUCATION SYSTEMS WITH WORKFORCE NEEDS, ON BEHALF OF THE PENNSYLVANIA BUREAU OF CAREER AND TECHNICAL EDUCATION.

AS PART OF THE PENNSYLVANIA BEST PRACTICES INITIATIVE, BUREAU OF CTE DIRECTOR DR. LEE BURKET AND CONSULTANTS FROM THE MEEDER CONSULTING GROUP CONDUCTED A ONE-DAY SITE VISIT TO LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER IN OCTOBER 2010. DURING THE VISIT, THE SITE VISIT TEAM CONDUCTED INTERVIEWS WITH THE LEADERSHIP TEAM, GROUPS OF CTE INSTRUCTORS, COUNSELING FACULTY AND STUDENTS, AND TOOK A WALKING TOUR OF CTE PROGRAMS.

INFORMATION ABOUT CTE IN PENNSYLVANIA CAN BE FOUND AT WWW.EDUCATION.STATE.PA.US/PORTAL/SERVER.PT/COMMUNITY/CAREER_&TECHNICAL_EDUCATION/7335/.

LAST UPDATED SEPTEMBER 2011

Partnerships with Post-secondary Institutions

To help students earn college credit while in high school, LCCTC has established dual-enrollment opportunities and articulation agreements with post-secondary institutions for many of its programs. For example, through a College in the High School program, health care center instructors have been approved as adjunct professors through Harrisburg Area Community College. Students who complete the medical language course receive college credit.

Another opportunity for students to earn college credit stems from LCCTC’s efforts to meet the program of study requirements as set forth in the 2006 Perkins Act. In order to provide a fourth year of math and English in its CTE programs, LCCTC established a dual-enrollment agreement with Harrisburg University (HU) through which HU instructors provide an Algebra I and an English Composition course at LCCTC for college credit. (Midway through the course, the leadership team and HU instructors review students’ grades and class performance to determine whether they will receive college or high school credit.) On average, more than 200 students enroll in the courses. LCCTC instructors sit in on the classes to help provide accommodations to students with IEPs.

BROWNSTOWN CAMPUS • 12TH GRADE NOCTI SCORES PERCENTAGE OF STUDENTS SCORING AT EACH LEVEL				
Year	Advanced	Competent	Basic	Below Basic
2007-2008	46%	14%	17%	23%
2008-2009	54%	14%	17%	15%
2009-2010	63%	7%	10%	20%

SOURCE: LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER, FEBRUARY 2011.

MOUNT JOY CAMPUS • 12TH GRADE NOCTI SCORES PERCENTAGE OF STUDENTS SCORING AT EACH LEVEL				
Year	Advanced	Competent	Basic	Below Basic
2007-2008	59.90%	14.98%	12.56%	12.56%
2008-2009	65.81%	10.26%	12.82%	11.11%
2009-2010	67.50%	12.08%	7.92%	12.5%

SOURCE: LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER, FEBRUARY 2011.

WILLOW STREET CAMPUS • 12TH GRADE NOCTI SCORES PERCENTAGE OF STUDENTS SCORING AT EACH LEVEL				
Year	Advanced	Competent	Basic	Below Basic
2007-2008	60.90%	13.70%	14.20%	11.20%
2008-2009	65%	18%	15.60%	1.40%
2009-2010	71.90%	15.80%	6.30%	6%

SOURCE: LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER, FEBRUARY 2011.



The LCCTC leadership team plans to continue its focus on improving student achievement. It also is committed to expanding the scope of the RTIL program and attaining post-secondary degree-granting status for the adult education division.

Focused leadership and a strong foundation of program quality continue to drive progress at LCCTC and to provide secondary and adult education CTE students with meaningful learning experiences.

Resources

LANCASTER COUNTY CAREER AND TECHNOLOGY CENTER • WWW.LCCTC.ORG

PENNSYLVANIA DEPARTMENT OF EDUCATION – BUREAU OF CAREER AND TECHNICAL EDUCATION

• WWW.PDE.STATE.PA.US/PORTAL/SERVER.PT/COMMUNITY/CAREER_&_TECHNICAL_EDUCATION/7335/

TECHNICAL CENTERS THAT WORK • WWW.SREB.ORG/PAGE/1084/TECHNOLOGY_CENTERS_THAT_WORK.HTML

Contact Information

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The following persons have been designated to handle inquiries regarding the non-discrimination policies:

**FOR INQUIRIES CONCERNING
NON-DISCRIMINATION IN EMPLOYMENT**

*Pennsylvania Department of Education
Equal Employment Opportunity Representative
Bureau of Human Resources*

333 Market Street, 11th Floor
Harrisburg, PA 17126-0333
Voice Telephone (717) 787-4417
Text Telephone: (717) 783-8445
Fax (717) 783-9348

**FOR INQUIRIES CONCERNING NON-DISCRIMINATION
IN ALL OTHER PENNSYLVANIA DEPARTMENT OF
EDUCATION PROGRAMS AND ACTIVITIES**

*Pennsylvania Department of Education
School Services Unit Director*

333 Market Street, 5th Floor
Harrisburg, PA 17126-0333
Voice Telephone (717) 783-3750
Text Telephone (717) 783-8445
Fax (717) 783-6802