

CASE STUDY

ERIE COUNTY TECHNICAL SCHOOL

ERIE, PA



ECTS'S KEY STRATEGIES AT-A-GLANCE

- **CTE teachers collaborate with math and reading coaches** to make academic subjects more relatable to CTE content.
- **“Reader Response”** days and a **“Word Wall”** give literacy a prominent presence.
- **Professional skills program** helps students to establish and build employability skills.
- **Strong relationships with sending school counselors** lead to cohesive support and guidance for students.
- **Plans of Study, Program Guides, and Course Sequences** provide valuable tools for students, parents and partners.
- **Focus on quality and use of data** through ISO registration permeates the school.



ERIE COUNTY TECHNICAL SCHOOL

Erie, Pennsylvania

Introduction

Erie County Technical School (ECTS) is located in Erie, Pennsylvania and serves 11 rural and suburban school districts: Fairview, Fort LeBoeuf, General McLane, Girard, Harbor Creek, Iroquois, Millcreek Township, Northeast, Northwestern, Union City and Wattsburg. ECTS is a part-time career and technical center (CTC) that serves 720 students in grades 10-12 during two half-day sessions (morning and afternoon). ECTS currently offers 18 CTE programs. The CTC has 21 technical instructors, a literacy coach, a math coach, a math instructor and a professional skills instructor. Professional support staff members include an admissions coordinator, a guidance services coordinator and a business partnerships coordinator.

Of the students that attend the CTC, 63 percent are males and 37 percent are females. About five percent of the student population would be considered non-traditional for their programs. For the 2009-2010 school year, 31 percent of the students belonged to a special population. About one percent of the student population is non-Caucasian.

The CTC is governed by a Joint Operating Committee comprised of representatives from its eleven sending districts. The leadership of ECTS includes a superintendent of record, an administrative director, a principal, a business manager, a coordinator of human and quality resources, a facilities manager, an information systems and technology manager and two supervisors of instructional support services.

ECTS has a strong culture of integrating literacy and numeracy into career and technical education (CTE) classrooms, and a very strong emphasis on the use of data to inform its decisions, having achieved and maintained the ISO Certification for quality since 2002. ECTS also has a multi-year Professional Skills Program to develop leadership and employability skills among all students.





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 Project 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

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.

STANDARDS ALIGNED SYSTEM INSTRUCTION



Integrate Literacy and Numeracy Strategies into CTE

Administrators and staff emphasize the role of integrating CTE and academic content and skills to provide students with deep and meaningful learning experiences. One approach to integration at ECTS centers on incorporating literacy and numeracy into the CTE classroom and lab experiences. Through the requirements of the Perkins Act, ECTS is accountable for students' mathematics and reading scores on the 11th grade Pennsylvania System of School Assessment (PSSA). As such, the leadership team and instructors are focused on enhancing the culture of learning and increasing reading and math proficiency of all students.

ECTS began professional development in these areas in 2006-2007 and established standing committees for literacy and numeracy in 2008-2009.

Each of these committees is comprised of approximately five to seven instructors as well as literacy and numeracy coaches. Superintendents from the sending school districts have been very supportive of ECTS's efforts and have provided funding for math and reading coaches to assist with the literacy and numeracy efforts.

CTE instructors at ECTS appear eager to incorporate literacy and numeracy strategies in their classrooms. They stated that students are often more receptive to academic concepts taught in their CTE programs because they are presented in a way that is relevant to their CTE interests. These instructors find that

students gain self confidence as they achieve success in their CTE programs. This success helps them to absorb the academic topics as well. Because they are learning in the context of their career interest and in an environment where they are typically getting better grades than in their sending school, CTE students are more inclined to ask for help when they need it.

ECTS hired a literacy coach in 2008 whose role is to assist faculty in implementing literacy strategies in their classrooms. ECTS has developed a formal literacy plan that includes the following actions:

- Create a literacy-rich culture in each CTE program
- Increase writing skills
- Increase reading skills and content literacy (equivalent of 12.5 books/year)
- Practice speaking and listening skills
- Train all staff members to use differentiated teaching strategies and incorporate higher-order thinking (H.O.T.) skills into lessons
- Incorporate assessment/progress monitoring

One instructor stated that by reading materials they are personally interested in, students develop a comfort level with reading so that when they do their textbook reading, it is less daunting and they are more relaxed.

All students at ECTS participate in literacy initiatives on a weekly basis. For example, students have weekly reading and writing practice through sustained silent reading periods and "Reader Response" days. During the weekly sustained silent reading period, students and instructors are expected to read materials of

educational or personal interest to them.

On Reader Response days, students are asked to read a short article, and then respond to discussion questions relating to the article orally and/or in writing. The responses are evaluated by the literacy coach and the best examples each week are posted on a literacy bulletin board in the front hallway of the building.

ECTS began a vocabulary development initiative in 2008-2009. This is a CTC-wide effort to increase students' grasp of vocabulary, both with technical terms as well as with basic SAT vocabulary. The SAT vocabulary not only helps prepare students for the SAT, but also builds a general level of more sophisticated vocabulary needed for the skilled workplace. There is a "Word Wall" in the front hallway of the building where a new word of the day is posted each day. The word of the day is also posted on classroom boards along with technical-specific vocabulary. In addition, the "top 100" SAT words are rotated on computer screen savers throughout the CTC. Students in the Art and Design program helped to create posters with terms and visuals for use with this program.

In addition to the CTC-wide literacy initiatives, individual instructors are also incorporating literacy into their CTE classes (in both theory classrooms and laboratories). For example, students in the Early Childhood Education program are required to write weekly observation reports for the preschoolers in the program. These reports, which are required to be at least five sentences, are included in the portfolios that

are sent home to the parents of the preschoolers. Students in the Electronics program are sometimes divided into two groups, and then asked to read and teach half of the textbook chapter to each other. The instructor observes and re-teaches the lesson the following day. Students in the Automotive Technology program read the textbook aloud during class and also read a daily "This Day in Automotive History" segment provided by the History Channel.

Students needing additional support with reading and writing participate in the Study Island program, described in detail in another section of this report.

In addition to the literacy strategies described above, all students at ECTS participate in numeracy initiatives on a weekly basis. For example, students have a "math problem of the day" that they are asked to solve. Students are taught math vocabulary and there is a mathematics word board. Students also participate in weekly math "challenge tests."

IN THE SPOTLIGHT

...The math coaches translate "math speak" from their students' math books into 'tech speak' relating to their technical programs.

ECTS hired a math coach in 2008-2009 who, along with a math instructor, are responsible for assisting faculty in implementing numeracy strategies in their classrooms and assisting students who need additional support.



Their aim is to make academic math more meaningful and concrete for students. In some cases, the math staff introduces abstract concepts before they are taught in the technical class. The math coach teaches a PSSA remediation course for juniors who scored poorly on the eighth-grade PSSA test.

ECTS has a formal “Numeracy Pyramid” that details three levels of “interventions”:

Level 1: Universal Interventions

- Aligning CTE curriculum to PA math standards
- Analysis of all PSSA math scores
- ECTS math problem of the day
- Weekly math evaluations
- Integration of math instruction through a variety of methods in each CTE program

Level 2: Strategic Interventions

- Mathematics benchmark evaluation of selected juniors within the basic and low-proficient levels
- Direct instruction and classroom demonstration of math strategies by math coaches
- Instructor support for implementation of math strategies into daily lessons

Level 3: Intensive Interventions

- Direct instruction of PA Math standards
- Use of Study Island mathematics program to check for understanding

Build Relevance through Cross-Curricular Linkages

ECTS established a “Professional Skills Program” in 1998-1999. The goal of this initiative, which is incorporated into all programs, is to ensure that ECTS graduates have the employability skills necessary for the workplace. All students participate in this program that includes three courses: “Leadership Principles,” “Business Principles” and “Total Quality Principles.”

First-year students (typically sophomores) take the “Leadership Principles” course. In this course, students work on the habits that enable individuals to take greater personal responsibility for all aspects of their lives. Interpersonal skills and attitudes are supported by materials such as the FISH! Philosophy and the 7 Habits of Highly Effective Teens by Sean Covey.

IN THE SPOTLIGHT

... The “Professional Skills Program” cuts across all technical disciplines to ensure that ECTS graduates have the employability skills necessary for the workplace.

The second course, “Business Principles,” is taken by second-year students. The objective of this course is to build awareness of business principles such as marketing, inventory control, profit and loss, as well as personnel management and economics.



STANDARDS ALIGNED SYSTEM INTERVENTION



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

Approximately one-third of the students at ECTS have Individualized Education Programs (IEPs), and approximately two-thirds of the total student population enters ECTS at the basic or below basic levels in math and reading based on PSSA achievement levels.

ECTS has a literacy remediation program for students needing additional support in reading and writing. The eighth-grade PSSA reading scores of all incoming students are evaluated to determine what level of support is needed. Students who scored at a basic or low proficient level are provided intensive supports on a weekly basis using lessons available from Study Island software. This pull-out class starts at the beginning of the year and continues until the 11th grade PSSA is administered in the spring. During the weekly sessions, students meet with a teaching assistant for lessons such as reading and comprehending standards-based passages. Students track their progress in a more confidential environment and re-test as needed to achieve mastery in Study Island categories.

ECTS has a PSSA Mathematics Prep course for students needing additional support in mathematics. This course utilizes a variety of methods to teach and review PSSA Mathematics concepts. The Pennsylvania PSSA Coach book is used as well as multiple education websites including Study Island. There is an emphasis on mathematics vocabulary, geometry, algebra and test taking tips and strategies.

An emphasis is placed on entrepreneurship in this course. Students develop a business concept and create a simple business plan and logo, which they present to the class. They also participate in mock interviews and learn about marketing and human resources concepts.

The third course, "Total Quality Principles," is taken by third-year students. This course provides students with a background in the concepts and implementation of total quality management. While participating in this course, students develop individual and group projects that allow them to practice such total quality tools as the Delphi technique, histograms and gap analysis.

The Professional Skills Program at ECTS was selected as the 2000 PA ACTE Exemplary Program of the Year and consistently receives praise from students and business advisory members.

In interviews with students, they mentioned several key lessons that they had learned from the Professional Skills Program, notably one frequent verbal prompt from the Professional Skills instructor "How can you say that in a more professional way?" Students also commented that they feel better prepared for the workforce than their fellow classmates at their sending schools who are not enrolled in a similar learning experience. According to the instructor, a major objective is to teach students to be proactive and to take responsibility for their choices. She said that students will often tell her "No one else has ever taught me about this."

Standards Mastery

ACADEMIC REMEDIATION PROGRAM

- Review 8th grade PSSA reading and math scores for incoming 10th graders.
- Using Study Island, benchmark all students who have never tested or who have scored low proficient, basic or below basic.
- Analyze results of benchmark scores, comparing these scores with 8th grade PSSA scores.
- All students who score mid-range proficient and basic on the benchmark test are recommended for remediation in Standards Mastery class which meets once a week for 45 minutes per session. Students scoring below basic may also go into the Standards Mastery class.
- Students who score advanced on benchmark test will be allowed to forego Standards Mastery class if they also scored in the upper tiers of the proficient range or higher on the 8th grade PSSA.
- Students in Standards Mastery class will be given formative assessments two more times during the year in order to monitor their progress during pull-out academic support.



Deliver Personalized Student Support and Guidance

In 2004, ECTS began a focused effort to develop strong, collaborative relationships with guidance counselors working at the 11 sending school districts. By developing these collaborative relationships, ECTS was able to shift from a sending-school-managed enrollment process to a more collaborative application process, meaning that ECTS staff members are more actively involved in recruiting and guiding student decisions about attending ECTS.

The ECTS counselors hold quarterly meetings with counselors from the sending schools. In a more recent development, during the 2009-2010 school year, ECTS and sending-school counselors started working together to help students plan their schedules.

Previously, students were guided to ECTS only by the counseling staff at the sending school, resulting in a student body that was disproportionately learning challenged and who did not have aspirations to participate in postsecondary education after completing high school. Now, students applying to ECTS are asked to provide information about their career interests and goals. They are rated by their home-school counselors and two instructors.

A student's admission decision is based on their application and recommendations of teachers and counselors at the sending schools. ECTS counselors and sending-school counselors work together to admit students to each of the ECTS programs.

The ECTS guidance coordinator explained that this new process has helped sending-school counselors become more familiar with ECTS's offerings and also helps students to "link" their academic and technical studies.

STANDARDS ALIGNED SYSTEM CURRICULUM

Develop a Standardized and Aligned Curriculum

As of 2009, ECTS instructors had developed Career Pathway Plans of Study for most of the CTC's programs. Plans of Study is a local initiative that covers 9th grade through 12th grade including suggested academic and technical courses. It also includes postsecondary elements and career opportunities. This effort is complementary to Programs of Study, which is a requirement of the 2006 Perkins Career and Technical Education Act that emphasizes development of CTE programs that include clear linkages between secondary and postsecondary CTE so students can make more successful transitions from one level to the next.

According to the supervisor of instructional support services, these documents, which are described below, are posted on the CTC's website and focus on the pathway to college by showing the academic classes that students should take to accompany their chosen career path.

The **Program Guide** provides an overview of the CTC's programs, including information on expected characteristics and traits for success, student certifications, industry accreditations, and course titles, numbers and hours. ECTS counselors often use this document with prospective students, parents and sending-school guidance counselors.

The **Course Sequence Chart** shows the courses students will take each quarter over the three-year program. It also indicates the number of hours and relative weight of each of the courses. ECTS counselors and sending-school counselors use this document to help students plan their course load.

The **Duty/Task List** is the most specific document. It details the content areas covered in each course as well as their alignment with national skill standards, Pennsylvania academic and career education and work standards and National Occupational Competency Testing Institute (NOCTI) technical skill assessments.

In the 2009-2010 school year, instructors focused on improving and enhancing their **Course Syllabi** to include information such as course descriptions, pre-requisites and course outlines. Instructors also added details about their grading plan. This is also important because while ECTS has a committee reviewing options for CTC-wide standardized grading, they do not currently have a program in place.



ECTS is working to achieve national accreditation for all of its programs by affiliating each program with a nationally recognized industry accrediting organization and participating in its program reviews to reach accreditation status. In 2009-2010, 12 out of the 18 programs offered at ECTS were accredited.

ECTS administrators emphasized the value of developing these Plans of Study materials. ECTS Principal Joe Tarasovitch explained that he thinks it is equally important to hold students and instructors accountable. These documents help students organize their priorities and help instructors make sure they are covering the necessary curriculum. The business partnerships coordinator added that she recently shared the course syllabi with industry representatives to show them that the ECTS curriculum is cross-referenced with reading and math standards.

SUPPORT STANDARDS ALIGNED SYSTEM WITH PROCESSES

Be Intentional and Systemic About Change

The culture of ECTS is based on high expectations for students and instructors. These core values are evidenced in their mission statement, which is: "The Erie County Technical School delivers career success to Northwest Pennsylvania through: employability, career planning, technical education, and supporting academics." In addition, ECTS has a "Quality Policy" which states: "The Erie County Technical School is committed to providing career and technical education that exceeds the expectations of our customers while continually measuring our progress and improving our programs and services." ECTS is focused on clearly articulated performance goals. The administration of ECTS has set a goal that 80 percent of students will achieve at or above the national norms on NOCTI written tests. They have established a "Gold Star" and "Silver Star" certificate program to recognize "Excellence in Student Achievement" based on students' NOCTI performance. Gold Star programs meet or exceed the state benchmark with all "advanced" student scores. Silver Star programs meet or exceed the state benchmark with "advanced" and "proficient" student scores. In 2008-2009, 10 programs received certificates. In 2009-2010, 16 programs received certificates.





Make Program and Instructional Decisions Based on Data

Administrators and instructors at ECTS recognize the importance of accessing and analyzing data to drive key decisions, change and instruction in order to meet the needs of students and the community. ECTS was among the first of eight career and technical education schools in Pennsylvania to undertake the ISO 9001 certification process. Beginning in 2001, the CTC's project team reviewed the CTC's processes to gauge the quality and customer focus provided through each process. With the focus on customer service and total quality, ECTS hoped to enhance its customer orientation, commitment to quality and overall operational efficiency. The project team was assisted by the Pennsylvania Department of Education, Bureau of Career and Technical Education and Penn State University--Greater Allegheny through the audit process.

IN THE SPOTLIGHT

... ECTS was the fourth career and technical school and the sixth school of any kind in Pennsylvania to achieve ISO 9001 registration.

On October 15, 2002, ECTS officially achieved registration status for its quality management system. It was the first educational institution to achieve registration status under the ISO 9001:2000 standard.

ECTS has incorporated the ISO 9001 standards at all levels of the CTC, from annual reviews of the administration to calibrating equipment for NOCTI tests. ECTS conducts annual satisfaction surveys of students and parents. The concept of "Total Quality Management"

is incorporated into the Professional Skills Program curriculum. In addition, every person in the CTC has the opportunity to report a need for corrective action. The administration is required to respond to each one.

The coordinator of human and quality resources explained that initially it was challenging to apply the ISO 9001 standards to a CTC environment, but by working as a team, ECTS has developed its own system to meet the standards. The School Director added that the focus on quality and standards helps ECTS to fine-tune processes within the CTC. ECTS participates in third-party audits each year and also conducts annual internal audits.

ECTS has numerous sources of data that they review every year to develop CTC-wide action plans. Administrators and instructors meet annually to develop classroom action plans and modify programs based on performance data and student and parent satisfaction results.

ECTS uses a "Key Indicators of Performance Success" dashboard to monitor their ongoing progress toward meeting their goals. An example of this dashboard is included in the Results section of this report. The dashboard lists performance criteria in the "process" areas of product realization (curriculum design and review), student services (guidance and placement services), resource management (fiscal, technology, facilities, food services, human resources) and quality management (administrative services, internal and external auditing, improvement). Each process area has numerous performance objectives, measures and criteria, and annual performance data is shown for each.

ECTS administrators and instructors regularly review the results of students' NOCTI technical skills assessments. Instructors create improvement plans to increase student achievement of specific competencies for which a significant percentage of students were under-performing.

In addition to the components of ISO 9001 certification, ECTS also incorporated the DACUM process in 2005. DACUM is an acronym for "Developing A Curriculum" and is an internationally recognized program that involves a storyboarding process to define the duties, tasks, knowledge, skills, traits and in some cases, the tools, that workers use in a particular field. The supervisor of instructional support services at ECTS is a certified DACUM facilitator and leads the DACUM process for the review of ECTS technical programs. Since 2004, ECTS has conducted DACUMs on 10 existing programs and two proposed programs.

Representatives from postsecondary education and business/industry provide input through their participation on the DACUM panels. The results of this process have been used to supplement the ECTS Programs of Study effort.

SUPPORT STANDARDS ALIGNED SYSTEM WITH PARTNERSHIPS



Cultivate Relationships with Community, Business and Industry Partners

The administrators and instructors at ECTS have built a strong support network for the CTC that includes community, and business/industry partners.

One particularly successful partnership is between the local Courtyard by Marriott hotel and the Tourism and Hospitality Management program. Since there is no hospitality "lab" in the facility for this program, students get their hands-on laboratory experience by working at the local Marriott facility.

ECTS holds semi-annual meetings for each of the program's Occupational Advisory Committees (OAC). According to the business partnership coordinator, these meetings are organized as large joint dinners for more than 130 business partners that represent all the individual programs. This allows for networking among the business partners, and creates a sense of the whole business community connecting with the CTC. After the dinner and large-group announcements, each of the individual program advisory teams are convened in small groups across the CTC, and all the advisory committees employ a standard agenda of topics to be discussed.

In addition to serving on the OAC, local business and community partners have many opportunities to engage with ECTS, such as hosting open houses, serving as NOCTI assessment proctors, hosting student interns and participating in DACUM workshops.

Each year, ECTS offers an Advanced Training Day (ATD). The purpose of the ATD is to provide students the opportunity to meet with recruiters and representatives from postsecondary training institutions. In 2009, about 40 organizations participated, including representatives from the military, technical colleges, four-year colleges and industry.

Although ECTS does not have a community college in close proximity, it has established many articulation agreements with other postsecondary institutions, such as the Community College of Allegheny County, Art Institute of Pittsburgh, Johnson & Wales University and Gannon University. These agreements make it easier for ECTS students to acquire postsecondary credits should they matriculate to these postsecondary institutions, which a large percentage of students do after their graduation.





RESULTS

Over the past 10 years, the post-graduation plans of ECTS students have shifted from a workforce focus to a postsecondary focus. In 1997, 22 percent of students surveyed one year after graduation went on to postsecondary programs. In the most recent survey, 68 percent of students were enrolled in postsecondary programs.

ECTS Quality Management System Sample of Performance Indicators Revision Date 6/9/09									
Performance Objective	Performance Measure	Performance Criteria	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	Target
Curriculum Reliability	NOCTI Exam Scores (Written) **new version of test, normative data unavailable	80% of students perform at or above the national norm	Benchmark Missed		Progress Achieved		Benchmark Achieved		80%
		Auto Body	83%	100%	100%	75%	83%	75%	
		Automotive Technologies	-	77%	72%	74%	82%	67%	
		Early Childhood Education	89%	80%	78%	86%	71%	63%	
		Art and Design	-	78%	94%	79%	100%	**	
		Computer Information Sys	78%	83%	100%	100%	89%	91%	
		Construction Trades	88%	100%	92%*	89%	93%	75%	
		Cosmetology	91%	75%	80%*	54%	62%	88%	
		Culinary Arts	89%	100%	100%*	75%	71%	40%	
		Drafting & Design	87%	71%	88%	78%	89%	64%	
		Electrical Engineering	50%	44%	25%	10%	43%	**	
		Electronics	57%	100%	75%	100%	50%	78%	
		Facilities Maintenance	78%	67%	75%	33%	50%	**	
		Graphic Communications	57%	43%	73%	100%	43%	14%	
		Health Assistant	100%	93%	88%	62%	82%	71%	
		Hospitality Management	-	78%	67%	55%	65%	31%	
		Metal Fabrication	67%	89%	13%*	73%	56%	33%	
Networking Technologies	-	56%	20%*	0%	33%	58%			
Tool & Die	100%	100%	100%	100%	0%	25%			
Attendance Rates	Periodic Attendance Reports--Campus	Average daily attendance is greater than 95%	93%	93%	n/c	93%	93%	94%	95%
Retention Rates	Periodic Enrollment Reports--Campus	92% of the students remain enrolled	68%	94%	97%	92%	94%	93%	92%
Enrollment Share	Enrollment Compared to Population	Enrollment equals 15% of ADM or a .25 point increase	13.4%	13.2%	13.1%	13.0%	12.7%	12.5%	15%
Customer Satisfaction	Student Satisfaction Survey	Areas achieve a grade of B or better	2.96	3.00	3.22	3.33	3.30	2.95	>2.68
Co-op Participation	Co-op Participation Rate	30% of seniors participate in co-op	18%	33%	28%	30%	29%	25%	30%
Transition Rates	Workforce, Military or Postsecondary	90% of all graduates attain transition--Campus	92%	92%	93%	96%	89%	89%	90%
Customer Satisfaction	Student Satisfaction Survey	Areas achieve a grade of B or better	3.00	3.1	3.27	3.15	3.25	2.90	>2.68

THIS CASE STUDY WAS PREPARED BY HANS MEEDER AND JENNIFER GRAMS 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 ECTS IN JANUARY 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/.



Administrators and guidance staff at ECTS are exploring ways to improve their recruiting, application process and overall marketing of the CTC. The goal of the effort is to place the “right student in the right program for the right reason” and to retain students.

Beginning in 2008-2009, ECTS started working with a marketing consultant to develop and implement a detailed marketing plan. The Admissions Coordinator explained that ECTS is focusing on “continuous drips,” regular and ongoing contact with current and prospective students and their families. A variety of marketing materials have been developed, such as thank you letters to current and incoming students, a welcome back letter to students from the principal and letters and postcards to applicants.

Resources

DACUM • www.dacum.org

Study Island • www.studyisland.com

International Organization for Standardization (ISO) • www.iso.org

FISH! Philosophy • www.charthouse.com

4Sight Testing • www.successforall.net/elementary/4sight.htm

The History Channel Classroom Resources • www.history.com/show/classroom

Pennsylvania Department of Education - Bureau of Career and Technical Education
www.education.state.pa.us/portal/server.pt/community/Career_&_Technical_Education/7335/

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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

COMMONWEALTH OF PENNSYLVANIA
Edward G. Rendell, Governor

DEPARTMENT OF EDUCATION
Thomas E. Gluck, Acting Secretary

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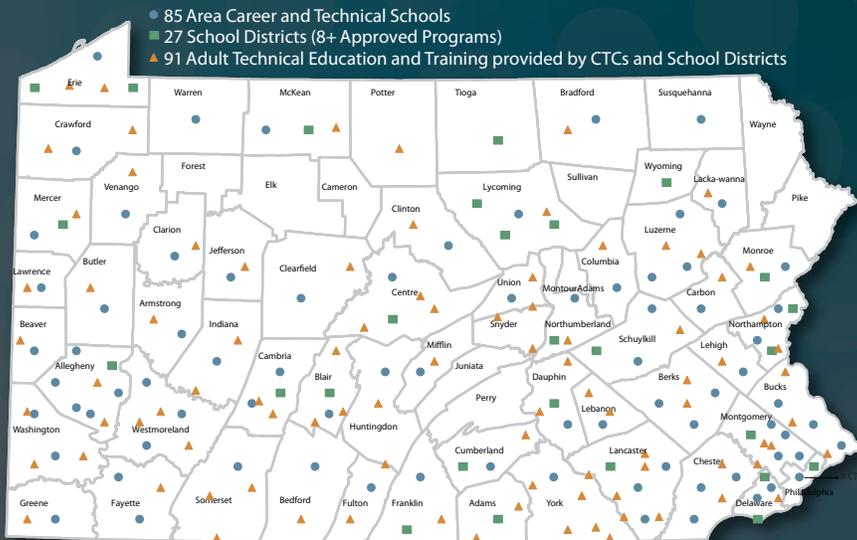
BUREAU OF CAREER AND TECHNICAL EDUCATION
Lee Burket, Director

DIVISION OF PROFESSIONAL DEVELOPMENT
AND SUPPORT SERVICES
K.C. Simchock, Division Manager

November, 2010

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SECONDARY CAREER AND TECHNICAL EDUCATION DELIVERY SYSTEM



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FOR QUESTIONS ABOUT THIS PUBLICATION

Bureau of Career and Technical Education
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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 about \$5 million for 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.

¹ Pennsylvania Area Career and Technical Education Schools 2009 Report
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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