

NOCTI Spotlight Series

Spring 2017

York County School of Technology – A Success Story

NOCTI believes any program that prepares an individual for a career provides tremendous opportunity to change lives while simultaneously raising the standard of living within a region, a state, and the nation. Commitment to this belief is the link between NOCTI, its customers, and like-minded organizations. NOCTI focuses on more than just providing over 100 industry-based credentials—we are partners, collaborators, innovators, researchers, and most of all—committed to preparing individuals for college and careers. With this in mind, from time to time, we like to highlight success stories that have the potential to be impactful and inspiring.

The story of York County School of Technology is a success story worth sharing. York Tech serves 1,680 students in grades 9 through 12 from 14 member school districts across York County, Pennsylvania. The student population consists of 60% free and reduced school meals and 25% of students have identified disabilities. York Tech is a full-time comprehensive model career and technical high school in which both technical programs of study and academic courses are offered. The school offers 26 career and technical education (CTE) programs that align to the following pathways: Communications, Construction, Criminal Justice, Culinary, Health Sciences, Engineering, Information Technology, Manufacturing, Personal Care Services, and Transportation. One of the key foundations that make York Tech successful is the consistent

collaboration and implementation of a county-wide comprehensive K-12 Career Guidance Plan that promotes the CTE opportunities offered by York Tech. Over the course of two years, the 14 member school districts sent school counselors and administrators from elementary, middle, and high schools, as well as central offices to collaborate and develop a plan to implement the Pennsylvania Career Education and Work standards throughout a student's K-12 educational experience. The York Country School of Technology is truly a story of success!

To understand York Tech's journey to success, it is helpful to understand some details of the Pennsylvania Student Occupational Competency Testing (SOCT) and Technical Assistance Program (TAP), the services provided by NOCTI and MAX Teaching, and some of the challenges facing YCST.

Student Occupational Competency Testing and Technical Assistance Programs

The SOCT and TAP programs were implemented by the Pennsylvania Bureau of Career and Technical Education and include pre- and post-assessment of CTE students using NOCTI credentials. As part of these programs, the resulting scoring data is used to gauge student knowledge. State-developed benchmarks for NOCTI's industry-based credentials linked to each

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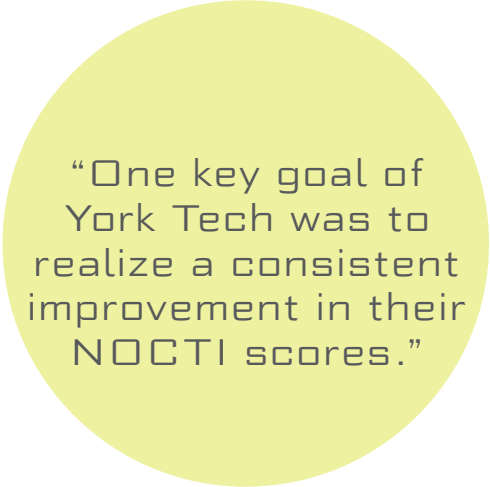
program of study provide a snapshot of participant knowledge at three levels upon completion of the CTE program: basic, competent, and advanced. The scoring data also plays an important role in professional development and improvement initiatives such as those integrated into the TAP program. TAP was implemented to help improve the quality of CTE programs across the state. Through the TAP program, CTE sites gain access to a variety of professional development opportunities to improve curriculum and instruction under the advisement of a group known as Career and Technical Distinguished School Leaders (CTDSL). The CTDSL works with school leadership to identify improvement areas and to provide guidance at the state level.

NOCTI

With over fifty years of experience in developing, managing, and delivering credential programs to support the improvement and advancement of CTE, NOCTI is a leader in the assessment and certification community. NOCTI has been ingrained in Pennsylvania CTE for over 20 years and works to provide CTE programs with support, resources, and data needed to be successful in the overall improvement process and with initiatives such as TAP.

MAX Teaching

MAX Teaching is also a key partner in the TAP program. MAX Teaching is a national literacy initiative focused on CTE and excels in classroom modeling and embedded coaching techniques that allow teachers to gain critical knowledge in a professional development setting. The MAX Teaching analysis method was created to identify strengths and challenge areas within the curriculum that, if addressed, would improve the delivery of instruction for current and future students. The MAX Teaching strategies have been an integral piece of school improvement initiatives across the country, including those at York Tech.



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The Process

The process of improving literacy involves introducing instructional strategies for reading CTE text and materials that will improve student understanding and retention of knowledge. This approach supports development of the skills needed to provide the optimal transfer of knowledge from the CTE instructor to the CTE student. MAX Teaching has developed a method to analyze NOCTI data within a site, region, and state. The ideology for this effort is that if schools have a common method to analyze and discuss data, improvement ideas and best practices could then be shared within a professional learning network.

The method for continuous improvement utilizes individual school scoring that is supplied to the schools directly from NOCTI. The electronic-based process uses no more than five symbols, (*, +, -, A, and ✓) in which data from an entire school can be analyzed in approximately 30 minutes. Through the use of data, this unique process assists in targeting what is working well and what areas may need improvement within the curriculum and instruction. The data mining

method identifies areas within the assessment where:

- Every student correctly answered all questions within each competency (Gold Star Level)
- Class mean for competencies where students are scoring 80% or higher (A Level, or Distinguished)
- Class mean for competencies where students are scoring between 51% and 79% (+ Proficient Level)
- Class mean for competencies where students are scoring at or below 50% (- Needs Improvement)

When analysis is done at the program level, data from the test standards can be examined to identify standards or entire units where the class is underperforming. This deeper look into the data can lead to exploration of potential improvement in curriculum, instruction, assessment, and project development. These results can also be used as part of a student learning objective process to improve programs. Additionally, this analysis can be used to develop a dashboard for the administrative team to target program areas in which teachers may need assistance. A student-level analysis can identify students who answered less than half of the questions correctly for a particular competency, which is an indicator that an individual student improvement plan may be needed.

MAX Teaching
initiated
operation
“Full Court
Press”

Challenges

Prior to the start of the 2012-2013 school year, York Tech was extensively monitored as a school in Corrective Action Level II by the Pennsylvania Department of Education and was preparing to enter its sixth year of school improvement. The administration, faculty, and CTDSL collaborated to develop an improvement plan that relied extensively on NOCTI data analysis and MAX Teaching professional development with a goal of moving out of the school improvement status and to become Pennsylvania’s largest highly rated comprehensive career and technical high school.

One key goal of York Tech was to realize a consistent improvement in their NOCTI scores, resulting in a steady migration of students from the basic level to the competent level, and ultimately to have 75% of students scoring at the advanced benchmark level.

In four short years, nearly 92% of YCST seniors earned advanced and competent achievement levels on NOCTI assessments. YCST has also improved its Pennsylvania School Performance Profile Score from 63.7% in 2013 to 83.6% and 82.0% in 2015 and 2016, respectively.

The Journey

The improvement journey of YCST began with professional development for CTE staff that included modeling and coaching provided in content literacy-based instruction (CLBI), along with NOCTI data analysis in order to target areas within the curriculum that needed improvement. CLBI allows the teacher to experience the strategies that can be used upon returning to the classroom. During the modeling phase, MAX Teaching uses teacher-provided content, creates a lesson, then models that lesson with students so that the teachers can witness how students react and engage within the CLBI environment. The final step is to provide teachers with the follow-up support they need to become proficient in using the CLBI framework.

The MAX Teaching approach was modeled in every technical program of study offered at YCST to demonstrate that CLBI is effective in all content areas. The following year, embedded coaching was provided to help support and sustain the CLBI efforts of the staff. The next step included expanding CLBI from the CTE classrooms to the academic classrooms.

Once the initial staff development was delivered, MAX Teaching initiated operation "Full Court Press", a name coined by Scott Rogers, Assistant Director at York Tech. Over a one-week period, six MAX Teaching consultants modeled CLBI in every academic class and worked with academic and technical leaders to provide the support needed for a full staff implementation of CLBI.



Signs of Success

In the 2016-2017 school year, York Tech was the first school to use this method and virtually eliminated areas with a class mean below 50%. Under the leadership of Director Dr. Dave Thomas and Assistant Director Scott Rogers, the YCST team looked toward the next level of excellence and the bar was raised to no longer show competencies below a 50% class mean, but rather to adjust the low end of the scale to identify competencies with a class mean below 60%. This is the first school in Pennsylvania to require new analysis of data and raise the bar even higher.

If Pennsylvania schools continue to work together and use their NOCTI data for analysis and improvement, Pennsylvania CTE is in a position to establish a level of excellence that can clearly demonstrate effectiveness while delivering the highest quality of theory and skill level transfer possible.

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Special thanks to the following contributors:

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