

April 2013

Quakertown Community School District: A Systematic Approach to Blended Learning That Focuses on District Leadership, Staffing, and Cost-effectiveness

his interactive video profile is the first of a series providing the reader with a real-life, practical story about how district and school leaders are working to improve student learning outcomes through the effective use of digital learning, defined as "any instructional practice that effectively uses technology to strengthen a student's learning experience." Much more than "online learning," digital learning encompasses a wide spectrum of tools and practice. Critical elements include an emphasis on high-quality instruction and access to challenging content, feedback through formative assessment, opportunities for learning anytime and anywhere, and individualized instruction to ensure that all students reach their full potential to succeed in college and a career. It's important to note that the strategies will look different in each district setting, and that they are constantly evolving.

This initial interactive video profile examines how one small rural district worked with important partners, including its local teachers' union, to improve student outcomes using effective applications of technology and blended learning strategies. Throughout this interactive video profile are short videos from district practitioners describing how they addressed specific issues. Click on the "video icon" to hear their stories

The Quakertown Community School District, or QCSD, is a traditional K–12 public school district in rural southeastern Pennsylvania, located in Bucks County, about an hour north of Philadelphia. QCSD has ten schools, including one high school, and serves approximately 5,500 students, 24 percent of whom are eligible for free or reduced-price lunch and 10 percent of whom are black or Hispanic.¹







"We can't prepare students for the future if we're not there ourselves." Lisa Andrejko, superintendent of Quakertown Community School District (QCSD), knows the value of keeping her staff on the cutting edge of emerging blended school models. QCSD students graduate well prepared for college and careers. And QCSD educators have opportunities to build more rewarding, varied, and impactful careers.

During the 2008–09 school year, QCSD started its blended learning program, which includes the K-12 Cyber School; a ninth-grade one-to-one laptop initiative, where every student receives a laptop to use at school and at home; the bring-your-own-device (BYOD) initiative, which allows all students

to bring their own device(s) to school, if they choose; and the integration of digital learning in traditional classrooms through the use of digital content and resources. In QCSD's blended learning model students can take online courses, either at school or off-site; face-to-face courses; or both online and faceto-face courses. These personalized, flexible learning options allow students to choose the best academic option for them.

Student engagement has increased dramatically, and student achievement has grown as a result.

- Tom Murray, Director of Technology and Cyber Education

Since the start of the program, student achievement data has shown real improvement. In 2011–12, OCSD's graduation rate increased from 88 percent to 95 percent.² In 2011–12, the district had its highest SAT and ACT scores to date, and also had the most students in the school's history score proficient on state tests. Further, College Board recognized Quakertown Community High School on its Honor Roll for increasing the number of students enrolled in AP From the courses and maintaining or increasing test scores.³ The number of QCSD students Tom Murray enrolled in online courses has tripled since the program's inception in 2008. More specifically, in 2012–13, 303 students in grades six through twelve enrolled in at Field least one online course 4

DISTRICT LEADERSHIP

From the

Field

A struggling economy pushed QCSD to consider cost-effective, financially sustainable school improvement models. Rising workforce skill requirements also forced QCSD to rethink what its students needed in order to succeed in a Lisa Andrejko global economy. Led by Superintendent Lisa Andrejko, QCSD administrators, teachers, teachers' unions, and the community worked together to create a blending learning model during the 2008–09 school year. QCSD engaged in a systemic

planning process that considered many of the Project 24 gears, including technology and infrastructure, budget and cost-effectiveness, curriculum and instruction, online assessment, and professional learning. Specific leadership initiatives are highlighted.

Updated mission and technology

plan. Recently, district leaders updated the QCSD technology plan to reflect changes in funding, new technologies, and the need for individual and business support. They worked with community stakeholders and business leaders to show that technology and digital learning are critical to the present and future success of the district and the community.

Offering anytime, anywhere learning provided a cost-effective, sustainable avenue to give students the flexibility and personalized learning they needed.

On February 29, 2012, QCSD announced its updated mission: "to create and support the conditions necessary to effectively leverage technology for learning." As part of QCSD's development of its new technology plan, the district also introduced its "21st Century Education Strategy." Key components of this strategy include the K–12 Cyber School, the ninth-grade one-to-one initiative, the BYOD program, and the integration of digital learning in traditional classrooms.

Partnership with the teachers' union. Prior to implementing blended learning in the district, students were leaving QCSD for virtual school alternatives. Bringing students back was a shared priority of district leadership and the union. The district leadership team worked closely with the local teachers' union to create the QCSD blended learning model. The district and union continue to work together to ensure that students benefit from improved learning options and that teachers have the support they need to adapt their teaching styles to the model. In

an online profile she submitted of QCSD, Andrejko noted, "The local union president has taught

online classes and is partially responsible for the district's professional development surrounding online learning. [Having] union leaders onboard with online learning in a tangible way is a great step forward for reform." Now, QCSD is able to re-enroll some of the students who left for virtual schools and retain more students.

From the

Chris Roth

Field

Data

If it's googleable, it's not a good assessment.

- QCSD Assistant Superintendent for Curriculum and Assessment Dr. Suzanne Laverick-Stone

DATA AND ASSESSMENT

Blended learning has challenged district leaders to work with teachers to rethink course design and assessments. In contrast to face-to-face classes where assignments and course materials may be discussed in class, cyber course materials are exclusively online. Discussions with teachers revealed that because all course materials are online, cyber courses require much more transparency and clarity of expectations than face-to-face courses. Cyber teachers also realized that assessments that focus on

information recall do not accurately assess students' higher-order-thinking skills, especially if they have access to that information through the internet. Consequently, at QCSD, online learning environments and the prevalence of technology have driven teachers of online *and* face-to-face classes to increase the rigor and quality of their assessments by including higher-level-thinking questions and project-based assessments.



CURRICULUM AND INSTRUCTION

In QCSD's "self-blend" model,⁶ students can take face-to-face courses on campus but can also choose to take online courses, either at school or off-site. Some QCSD students enroll only in on-campus, face-to-face courses. Others enroll in face-to-face courses for part of the day and take other courses online, either on campus or off-site. Still others are full-time online students who rarely if ever set foot on campus.⁷ These personalized, flexible learning options allow students to choose the best academic option for them and still participate in traditional face-to-face activities such as lunch, sports, and other

extracurricular activities.

Curriculum

Determining student learning style. Prior to enrolling in an online course QCSD requires that students take an initial assessment to determine if online learning fits their learning style. In addition, once enrolled, all students are required to complete a cyber orientation course. Cyber students are also assigned an academic mentor who provides guidance and support to ensure that they stay on track and engaged in their online courses. With the advice and support of teachers, parents, and district staff, students choose the arrangement that best fits their needs.

Online courses offered. Teachers are selected to teach online courses based on student demand. In the high school, 31 percent of teachers teach at least one online course, resulting in sixty unique cyber classes available to students. In the middle school, six teachers offer twenty unique courses for grades six through eight.⁸

Online Courses Offered to Students 2012—13	
High School	Middle School
8 math courses	5 math courses
7 English courses	3 English courses
10 science courses	3 science courses
8 social studies courses	3 social studies courses
16 foreign language courses	3 physical education courses
3 health courses	3 elective courses (computer literacy, general
6 elective courses (e.g., creative writing, art history, personal finance)	music, and art)

Integrating digital learning in face-to-face instruction. With many QCSD teachers involved with online learning, the district has also seized the opportunity to expand the integration of technology into face-to-face instructional settings. With access through the one-to-one and BYOD programs, teachers are able to utilize different types of content, assessments, and instructional strategies to meet the needs of their students. For example, an astronomy teacher developed a lesson in which his students had a real-time discussion with a former astronaut; in another class, a middle school teacher identified activities for each student based on their

From the

Dan Wallace

Field

specific needs, and each student in the class had the ability to focus on a different language arts skill until they mastered the content. QCSD has seen the uses of digital learning change instruction in online and face-to-face settings.

STAFFING

From the

Tom Murray

Field

QCSD has changed its approach to staffing in numerous important areas, including hiring, courses offered, professional development, teacher roles and schedules, modes of communication between teachers and students, staff supports, and teacher pay.

Changes in hiring practices. Blended learning requires different teacher competencies and skills. As a result, school and district leaders have begun to change the way they screen

prospective teachers. Candidates are asked to respond to scenarios that require them to demonstrate flexibility and the ability to adapt. Teachers are also asked questions about their use of technology to teach content, assess performance, and differentiate instruction for students. At QCSD, "teachers need to know more than just Microsoft Word," says Todd Silvius, technology coordinator at QCSD. "They need to know how to apply technology to learning."9

Adding support staff. To give teachers more time to focus on instruction, the district created two support staff positions—technology coordinator and cyber mentor—to help minimize the demands of teachers' non-instructional duties. "Teachers are not tech support. I'd rather have my teachers spending time teaching than checking log-in data," says Andrejko. "That's a responsibility we can give to someone else." The **technology coordinator** manages hardware, trains teachers and students to work with the school's learning management system, and fields questions from students. The cyber mentor supports teachers in course and curriculum development, monitors student progress in online

courses, and communicates frequently with

students and their families.

Flexible scheduling. Blended learning teachers enjoy the flexibility of teaching online courses. Because content is delivered asynchronously, teachers are not confined to scheduled, live sessions and can communicate with students based on need and availability. Some blended learning teachers spend a portion of their workday delivering online courses from off campus and come to the school building for only a portion of the school day to teach face-to-face classes. 11 One middle school teacher works part-time and teaches only online courses.¹² This flexible approach allows teachers to pick the schedule that best fits their needs.

Why am I going to force all teachers to sit in the same workshop when many of them already have it mastered? Some of them have no idea what you're talking about, and many of them are just right. But that's what we did to kids for so long. We can't do that to teachers either. So, we differentiate our professional development to really meet their needs.

- Tom Murray, Director of Technology and Cyber Education, **Teacher time dedicated to online courses.** Much of the blended teacher's role is similar to that of a face-to-face teacher; he or she teaches the same number of classes and maintains the same teacher-to-student ratio. For each online class they teach, blended learning teachers receive one class period during the school day to dedicate to tasks associated with their online courses. Teachers use this time to plan and prepare materials for their online courses, communicate with students and parents, track and grade student work, and complete administrative tasks. Many teachers express frustration that this single class period does not provide sufficient time for them to collaborate with other teachers, nor does it capture the increased workload that online courses have produced. Teachers make themselves available to communicate with their online students before school, between classes, and after school—"sometimes until ten p.m. and on weekends," according to Matt Rach, a second-year chemistry teacher at the high school. "It's a lot more communication than I thought it would be." ¹¹³

PROFESSIONAL LEARNING

Prof. Learning With the implementation of the blended learning model, QCSD implemented changes for professional learning, including the innovation of teacher professional development, teacher development of online courses, and the provision of growth through expanded teacher roles.

Innovating professional development. All blended learning teachers are directly involved in identifying areas for their individual professional development. "The one-size-fits-all approach doesn't work in meeting the needs of students, and it certainly doesn't work for teachers, either," says Tom Murray. "The expectation is excellence. The road map, however, varies from teacher to teacher." It took QCSD several years to redesign professional development to meet blended teachers' specific needs. "We had no professional development the first year, and by midyear, teachers were totally overwhelmed," says Chris Roth, president of the Quakertown Community Education Association, the local teachers' union. "It took us a few years to learn how to work with teachers to identify and work through their issues."

QCSD no longer requires teachers to track professional development by assigned hours, but gives them the freedom to evaluate and address their own needs. On professional development days, teachers select from a menu of dozens of inperson sessions focused on specific needs, including time to share challenges and best practices with QCSD peers. Teachers also participate in frequent trainings on lesson design, course development, and effective use of a learning management system and other online tools. Teachers also receive technical and curricular support from district staff

Teachers develop online course content. All teachers who teach online courses are QCSD teachers, with the exception of subjects like Mandarin and Japanese, for which no certified teacher is available in the district. Online course teachers are responsible for developing the online courses, including the content, activities, and assessments. The district uses a learning management system

According to district leaders, QCSD's blended options have brought substantial sums in per-pupil revenues back to the district that otherwise would have gone to cyber charters.

From the

Chris Roth

Field

and provides professional development and templates for teachers to use in course development. Teachers typically develop the online courses in the summer and tweak them during the school year. Teachers receive a stipend for the initial online course development.

Opportunities for additional pay. While blended learning teachers are currently on the same salary schedule as all other teachers in the district, they have opportunities to earn additional pay. All teachers who design online courses receive a stipend of \$30 per hour for course development during the summer and throughout the school year.¹⁵

Career ladders, blended learning teachers, and teacher-leader

roles. As part of a broad district-wide compensation reform, the district is in the process of negotiating a new contract with the teachers' union that is expected to develop a formal career ladder which might include differentiated pay for blended learning teachers. "We are really trying to break the

Our teachers and administrators are committed to doing what's best for kids, and they are not afraid to try new things and collaborate.

- QCSD Superintendent Lisa Andrejko

mold of how teachers are paid, and want to provide career paths for teachers for a variety of roles," says Nancianne Edwards, director of human resources at QCSD. The district is also very interested in creating roles for great teachers who want to take on leadership roles without leaving the classroom. "There should be career paths for people who just want to be an excellent teacher but also want to use their skills as a practitioner to educate colleagues and be a leader," Edwards says.

Accomplished blended teachers informally take on leadership roles by sharing best practices with their colleagues in non-supervisory positions. Teachers meet regularly to discuss professional development, schedules, and student needs. "These roles are really coming from the teachers, not from the top down," says Andrejko. "They are naturally rising to leadership roles by asking, 'What are our needs?' and 'How can we rearrange ourselves to meet these needs?'"¹⁶

Developing blended expertise.

Teachers agree that their new skill sets and reputations as QCSD blended teachers will make them marketable "experts" and "leaders" in the virtual learning sphere, both inside and outside the district. "We are leaps and bounds ahead of everyone else," says Ryan Stetler, a health science teacher at the high school.

A cyber program will never work without highly trained teachers working with a small groups of students.¹⁷

QCSD blended teachers are prepared to serve unique, cutting-edge roles in their schools and are also likely to see the benefits of their experience for years to come.

As cyber enrollment increases, both school and district leaders agreed that teachers remain at the core of the blended learning program's success. "There's a fear in the cyber world that teachers might be replaced by one teacher who reaches 300 students," says Roth, the union president. QCSD's blended learning program reflects this vision, with teachers having consistently remained central to the program's operations and QCSD students' resulting success.

BUDGET AND COST-EFFECTIVENESS

Budget

\$263,000 investment made possible by federal stimulus funding. The funding was used to support initial purchase of equipment (such as netbooks), contracts for software licenses, professional development costs, and upgrades to the wireless network. In the program's second year, the school board committed \$600,000 to fund network upgrades, one-to-one computers, and a technology staff position. The cyber program is currently supported

through a line item of approximately \$300,000 in the annual technology budget. As the blended learning program grows, QCSD expects to invest in facilities renovations to accommodate increased enrollment. This is expected to include a \$60 million renovation for the high school campus, which will have a "Cyber Commons" space, an outdoor wireless commons, and small-group collaboration areas throughout the building. 19

Financial benefit from student re-enrollment. QCSD's flexible learning options have enabled the district to re-enroll students who previously left to attend cyber charter schools. QCSD retains these additional revenues for every year a student remains enrolled there. QCSD also retains funding for students who would have dropped out or left but have chosen to stay due to the in-district blended options.²⁰

"We provide the flexibility of learning through a cyber program and through face-to-face teachers," says Roth. "We don't force parents to choose one or go elsewhere." Andrejko notes another benefit of QCSD's online offerings: "If we can prevent students from going elsewhere for cyber learning, we do not have to invest as much in helping unsuccessful students pick up the pieces when they return." She also cites benefits of QCSD's

According to district leaders, QCSD's blended options have brought substantial sums in per-pupil revenues back to the district that otherwise would have gone to cyber charters.

blended program through savings from decreased demand for summer school, remediation services, tutoring, and even special education services due to improved student performance.²³

Financial benefit of partnerships with other districts. QCSD's second-largest source of revenue not derived from taxes is its partnerships with other districts. In 2011, QCSD began Bridges Virtual Education Services, an initiative that enrolls students from other districts in online courses taught by QCSD teachers and provides professional development on blended learning for teachers in those districts. In 2011–12, Bridges grossed more than \$156,000.²⁴ QCSD also operates a virtual summer school program for surrounding school districts, which brought in \$20,000 in 2012. Finally, QCSD runs a student "exchange" program with neighboring Palisades School District. High school students from Palisades take online courses taught by QCSD teachers, and elementary students from QCSD take online courses offered through an online courseware vendor and facilitated by Palisades teachers. The K–12 program would cost \$4,000 per student for curriculum and K–12 teacher support, but the districts have elected to purchase just the curriculum at \$1,800 per student, giving students inperson, local support through Palisades teachers and staff. This creates a savings of \$50,000 per year for both districts.²⁵

Cost-effective staffing. The high school moved away from block scheduling to a more traditional, seven-period schedule to allow teachers time during the school day for online courses. The traditional seven-period schedule increases a teacher's instructional time by one hour, which some teachers use to teach an online course. Most blended teachers teach more than one cyber course—some face-to-face courses have been replaced by online offerings to meet student demand. The high school has been able to address students' needs by offering more online courses with existing staff.²⁶

TECHNOLOGY AND INFRASTRUCTURE

Tech

Encouraging BYOD. QCSD has committed to spending less on hardware and investing in its network. The district spends \$250,000 annually to replace approximately 500 old laptops for a cost of \$500 each. However, the district allows students to bring their own technology (laptops, tablets, smartphones), which helps keep the costs from being even higher. "Typically, you buy laptops, refresh them every four years, and give hand-medowns to lower grades. Even with the price of technology coming down, [that] is not a

model we can sustain," said Andrejko. "We think differently about what we give our kids. We place emphasis on improving the network infrastructure, and give students the freedom to access the network in a variety of ways. We supply laptops, but students often bring their own devices."²⁷

Community partnerships to increase access to technology. To support students completing a portion or all of their course work from home, the district has partnered with local businesses, such as Best Buy, Verizon, and Comcast, to offer discounts on hardware and affordable high-speed internet access to students' families. Comcast provides \$9.99 per month internet service for any family that qualifies for free or reduced-price lunch and does not already have service at home. Best Buy offers educational discounts to families whose students are enrolled in the cyber program or any high school student who chooses to purchase their own laptop instead of using the school laptop.²⁸ QCSD aims to ensure that students have access to learning anytime and anywhere. Digital learning through the cyber program and in the traditional face-to-face environment would not be possible in QCSD without district leadership and collaboration across all stakeholders.

CONCLUSION

In 2011, QCSD won the Innovator Award for Innovative Online Learning Practice from the International Association for K–12 Online Learning (iNACOL).²⁹ According to district officials and teachers, QCSD's blended learning program has constantly improved

We are not going to allow our children to fail.

- QCSD Superintendent Lisa Andrejko

From the
*KIMBERLY
REITNAUER
Field

"As a district, we are compelled to give students the best learning opportunity," says Chris Roth. "This is a true collaborative effort to work toward the common goal of putting student learning first." By giving students online and face-to-face options to meet a variety of learning styles, Superintendent Andrejko is confident that QCSD can give its students the best possible chance of success.

CREDITS

This case study was written by Jiye Grace Han, Joe Ableidinger, and Bryan C. Hassel of Public Impact, and Rachel Jones and Mary Ann Wolf, consultants to the Alliance for Excellent Education.



The Alliance for Excellent Education is a Washington, DC-based national policy and advocacy organization that works to improve national and federal LIANCE FOR education policy so that all students can achieve at high academic levels and graduate from high school ready for success in college, work, and

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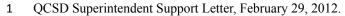
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The authors are grateful to Quakertown Community School District for showing firsthand their work and impact on teachers and students. Specifically, the Alliance for Excellent Education and Public Impact appreciate the time and resources provided by:

Lisa Andrejko, Superintendent Nicole Hazelwood, Academic Mentor for the Cyber Program Rich Kiker, Director of Online Learning, Palisades School District Thomas Murray, Director of Technology and Cyber Education Nicole Roeder. Teacher Chris Roth, QCA Liaison for Professional Development Todd Silvius, Technology Coordinator Dan Wallace, Teacher

^{*}In memory of Quakertown student Kim Reitnauer who passed away recently. Kim was an amazing student and she had an incredible impact on the schools and community in Quakertown.

ENDNOTES



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