



CASE STUDY

Launching Blended Learning in Downingtown Area School District (PA)

by John J-H Kim and Rachel Melikan

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John J-H Kim & Rachel Melikan

Larry Mussoline, superintendent of Downingtown Area School District (PA), surveyed the newly configured cafeteria at Downingtown High School East with satisfaction. Seated at various high-top tables, students were working at their laptops, which were conveniently charging at the built-in outlets. Some students were collaborating on projects and others were working independently as they enjoyed the snacks and drinks available throughout the day in the cafeteria. No longer required to spend their free periods in study hall, these students were here, engaged in work for their blended learning classes.

Mussoline launched the blended learning program in the district's two conventional high schools in 2013, and named it Ivy Academy. Ivy Academy offers blended courses that combine time spent in a traditional face-to-face class with time spent learning online, asynchronously. Now in its third year, the program has nearly a quarter of the district's conventional high school students and a cadre of the district's certified teachers participating; its academic results have been in line with those of conventional classrooms in the district, and early results for this year show that results for blended classes in many cases are exceeding those of conventional classrooms.

Sowing the Seeds of Innovation

Located 40 miles west of Philadelphia in Chester County, Downingtown Area School District (DASD) is the ninth-largest public school district in Pennsylvania, serving approximately 12,000 students in grades pre-Kindergarten to 12. DASD is a relatively affluent district, with just over 10% of its students qualifying as “economically disadvantaged” compared to 40% for the state,¹ and only slightly more than 1% of its students speaking English as a second language. DASD has a reputation as a high-performing district, with a graduation rate of 98%, an average SAT score of 1608,² and a record of consistently ranking among the best high schools in the country, according to *U.S. News and World Report*, *Newsweek*, the *Washington Post*, and other publications.³

Mussoline assumed the superintendency in 2009, and although the district was already high-performing, he was not content to rest on these laurels. “I want Downingtown to be the best. I want us to change the face of education.”⁴ Mussoline firmly believed there was more to be done to best prepare *all* students for success in college and career. Beyond mastery of subjects taught in conventional classrooms, he believes that today's students need to develop excellent self-driven



DOWNINGTOWN AREA SCHOOL DISTRICT (PA) FAST FACTS

12,291 students:

78.5% White **3.3%** Black or African American
11.4% Asian
4.6% Hispanic **2.2%** Mixed or other ethnicities

16 Schools:

3 high schools
2 middle schools
1 6th-grade center
10 elementary schools

Total Operating Budget:

\$207.3
million

This case draws heavily upon “Ivy Academy: Blended Learning in Downingtown Area School District” by John J-H Kim and Daniel Goldberg, Harvard Business School Publishing, 2016, available at <https://cb.hbsp.harvard.edu/cbmp/pages/home>

time management skills and technology literacy in order to thrive in less structured environments after high school. Further, he believes that with thoughtful program design, technology-driven learning can provide a way to better serve all students.

Early in his tenure, Mussoline began launching smaller-scale, technology-enabled innovations in instructional delivery models to increase the rigor of course offerings and to better meet students' academic needs. In 2011, in response to overcrowding at the district's two existing high schools, Mussoline launched STEM Academy: a science, technology, engineering, and math-focused magnet high school where every student receives a personal laptop and students learn asynchronously at their own pace within the school building. Since its founding, STEM Academy has seen rapid growth due to high demand among students, and in both 2013 and 2014 it was recognized as the best high school in the state of Pennsylvania. According to Mussoline, STEM Academy "caused disequilibrium in the system, and that was intentional," whetting the appetite of students and parents in the district for alternative models for learning.

Building upon this success, Mussoline then launched DASD's Cyber Academy: an in-district, online, cyber charter school. In Pennsylvania, all students are eligible to enroll in cyber charter schools, and when they do, the district must pay approximately \$10,000 per student to the charter school. "Either we play the game, or somebody's going to eat our lunch!" Mussoline declared, determined to remain competitive in an increasingly school choice environment. The courses for DASD's Cyber Academy are taught fully online by a contracted third party that is paid about \$700 per course per student; all DASD students are eligible to enroll in one or more Cyber Academy course.



DR. LARRY MUSSOLINE



July 2009–June 2017

Superintendent

Downingtown Area School District (PA)

Retiring at the end of this school year



2005–2009

Superintendent

Wilson School District (PA)



1998–2005

Superintendent

Pine Grove Area School District (PA)



1989–1998

Principal

Central Dauphin School District

1986–1989

Assistant Principal

Central Dauphin School District



1979–1986

Teacher

Middletown Area School District

Bishop Hafey High School



Ph.D.

Penn State University



M.Ed.

Shippensburg University



B.S.

Bloomsburg University of Pennsylvania

Economically Disadvantaged:

10.51%

English Language Learners:

1.12%

Special Education Identification Rate:

17.11%

Performance:*

98%
graduation rate

Performance:*

1608
average SAT score

Sources: <http://www.dasd.org> and <http://www.paschoolperformance.org/Profile/135>.

Data is from 2015-16 school year except where otherwise noted.

*As of September 2016.

Cyber Academy provides students with additional options outside of their normal course catalog, provides flexibility in their schedules, keeps students in-district, and preserves district funds.

I have this belief that we don't need a 2 x 4 x 8 x 180 paradigm in education: 2 covers to a book, 4 walls to a classroom, 8 periods to a day, 180 days to a year.

—Larry Mussoline
Superintendent

While STEM Academy and Cyber Academy involved small subsets of students, the success of these efforts helped set the stage for the larger-scale blended learning program that Mussoline envisioned. Mussoline confirms, “My belief is to create and embed anchor programs (exemplars) within the district and then use those programs to drive internal change throughout the district.”⁵

Revolutionizing Education Through Blended Learning

The Case for Blended Learning in DASD

Mussoline felt strongly that DASD should offer a blended learning program at scale, one that would be available to *all* district high school students. He envisioned many benefits of a blended learning program for students. Blended learning offers the opportunity to develop among its students time management skills, agency, and technology literacy skills—skills essential to preparing students for the 21st century; and, in fact, the district’s strategic plan prioritizes preparing 21st-century learners and offering flexible educational opportunities.⁶ In Mussoline’s view, blended learning provides motivated students with a chance to take more classes, use summer for learning time, and possibly graduate early. Equally important to Mussoline, who says he himself never really liked school as a child, is that a blended learning program offers a way to reach students who are disengaged in conventional classrooms. “I have this belief that we don’t need a 2 x 4 x 8 x 180 paradigm in education: 2 covers to a book, 4 walls to a classroom, 8 periods to a day, 180 days to a year. I don’t believe that’s the only way to serve our kids. I’ve seen a lot of kids who are disengaged, and I

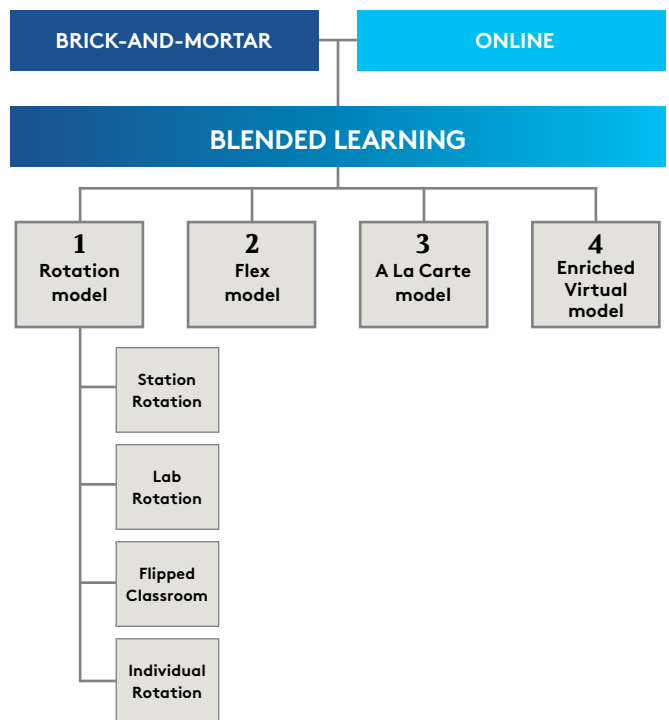
swear they’re disengaged because of the system: there’s no alternative for those kids,” he explains.⁷

In addition to benefits for students, Mussoline hoped a large-scale blended learning program would also change the culture among teachers in the district. “Implementing blended courses was a way to force a different delivery system and show people that different can be better,”⁸ he says. He hoped that a blended learning program might help to shift teacher culture within the district to encourage more transparency, collaboration, and idea-sharing, though he knew these goals would not be achieved without challenges.

A Vision for Ivy Academy

While there are many types of blended learning (*Exhibit 1*), Mussoline had a specific vision for the program at DASD. He aimed to build an enriched virtual model in which students would be face to face with a teacher a certain percentage of the time during the typical school day, and spend the rest of their time working on their own, asynchronously, online. It was critical to Mussoline that the program be open to *all* DASD high school students without exception. In addition, it was important to him that courses be taught by certified Downingtown teachers, not by teachers from another district or from private organizations. Also of note in his design was that

Exhibit 1 MAJOR MODELS OF BLENDED LEARNING



Source: Representation of “Blended Learning Definitions.” Clayton Christensen Institute for Disruptive Innovation. <http://www.christenseninstitute.org/blended-learning-definitions-and-models/>

the district would begin by offering a blended learning version of existing classes, and all blended courses would have the summative midterm and final curricular assessments common to courses taught in the district's conventional classrooms. This would provide a consistent standard by which to measure performance.

Launching Ivy Academy

Forging the Way: Kristie Burk

Mussoline began by creating a new position for a Coordinator of Cyber and Blended Learning. The Coordinator of Cyber and Blended Learning would report directly to the superintendent and would lead a newly created department dedicated to DASD's exploratory efforts in blended learning. Advertising the position over LinkedIn in 2013, Mussoline met Kristie Burk. She had previously worked in traditional, online, as well as blended schools, which Mussoline felt gave her valuable experience and perspective. As part of the interview process, Burk and the other candidates were asked to teach a sample lesson to a DASD teacher on how to teach in an online setting. Mussoline was impressed with Burk's ability to engage teachers, be collaborative, and deliver an effective lesson. He was positive she was the right person for the job. As Mussoline reflects, "Kristie Burk is key to this whole initiative. She's patient; she'll tell me when I'm wrong; she's capable. If I had made a wrong hire here, none of this would have worked."⁹

Defining the Model

Mussoline provided his vision and framework for Ivy Academy, but looked to Burk to develop the specifics of the model. At DASD's conventional high schools, the schedule rotates through a six-day cycle with eight periods each day, and a traditional course meets for one period on each of the six days in the rotation. For blended courses, Burk and Mussoline decided that the course should meet in person only two days out of a six-day cycle, and during the remaining four days, students would be able to work asynchronously online on their own. Teachers would be available to use these "off days" for remediation. They agreed that any teacher who had already taught a given course in a conventional setting was welcome to sign up to teach a blended version of that course. Teachers would initially be recruited on an opt-in basis. In terms of how to adapt conventional curriculum to a blended format, Burk and Mussoline set basic expectations such as requiring use of the district's learning management system, Schoology, and setting standards for organization, but in large part the adaptation approach was left to teachers to decide for themselves. Teachers took many different approaches. Some recorded all of their lectures as videos and put them online, using classroom time for review and discussion rather than to introduce new material. Others incorporated to a greater extent online discussion forums and supplemental materials already available online.

All students without exception were allowed to opt into Ivy Academy courses. In the course catalog, students might find two courses with the same title and level, but one would be marked "IA" for Ivy Academy. Burk encouraged teachers to reach out to students directly to encourage them to consider taking an Ivy Academy class and to explain what was different about it and why it could potentially help them. Burk and Mussoline also carefully considered how students would be allowed to spend their time during the remaining four days when not in class. Mussoline felt strongly that the self-directed culture of the



KRISTIE BURK



2013–Present

Coordinator of Blended and Cyber Learning

Downingtown Area School District (PA)



2016

Schoolology Administrator of the Year Award Recipient



2012–2015

English Instructor, Blended
Eastern University



2008–2011

English Instructor, Online
Immaculata University



2004–2009

Online Course Designer and Instructor

Pulaski Technical College



2005–2008

SAT Scorer

Pearson Educational Measurement



2004–2007

Adjunct Education Professor, Online
St. Xavier University



1997–2005

English Teacher, Online and Traditional

Doctoral Candidate Teaching and Learning Online
Johns Hopkins University



Instructional Technology Specialist Certificate

Temple University



M.Ed.

University of Massachusetts-Boston



B.A.

Providence College

STEM Academy, where students were given free periods to use as they chose rather than being assigned to study hall, was worth emulating for the Ivy Academy courses.



The Challenges of Change

Long-standing practices and structures make innovation particularly challenging for well-established organizations. And, perhaps counterintuitively, introducing innovation in successful organizations can often prove particularly difficult, because change may not be thought necessary or may even be perceived as a threat to continued success. Further, innovation, which by definition involves pattern-breaking change, requires each individual involved to adapt to new ways of doing things, assume new responsibilities, and embrace a new way of defining his or her role; perhaps equally difficult, it means a shedding of old patterns and a relinquishing of certain functions.

At DASD, despite strong leadership and thoughtful planning, Burk and Mussoline encountered many objections along the way to launching this large-scale blended learning program, and had to work with different stakeholder groups to build support.

DASD School Board

When Mussoline first began sharing his ideas for a large-scale blended learning program with his school board members, he encountered some skepticism. Board members were understandably concerned about the union's buy-in, and also about the impact the program would have on the district's budget. Mussoline was able to allay the budget concern by guaranteeing that there would be zero additional salary costs other than the salary needed for the Coordinator of Cyber and Blended Learning; all blended courses would be taught by DASD teachers, and Mussoline agreed to only run a blended course if it had at least 25 students enrolled.

Principals

DASD's two high school principals also had concerns about the program. Principals shared their hesitations about the appropriateness of blended learning and were especially concerned about teacher buy-in for the program. They pushed back on how students would spend their time when not in class, and stressed to Mussoline the importance of sticking with the practice of keeping students in study halls. But Mussoline held firm, and to accommodate the increased number of students not in class and not assigned to study halls, DASD renovated and reconfigured the libraries and cafeterias at both high schools to make the spaces more online-learning friendly, at a total cost of approximately \$1.3 million.

Teachers' Union

Mussoline also had to work to build buy-in from the district's teachers' union, which was worried about the logistical challenges posed by blended learning, including changes to class schedules, preserving existing jobs, and intellectual property issues. Mussoline worked with the union to develop contractual language that assured that jobs would not be eliminated as a result of the program, that participating teachers would be provided with training on how to teach blended courses, and that teachers who participated in the program would not be asked to take on larger course loads. While addressing these concerns and building union and teacher buy-in were important to Mussoline, he was also careful to protect the goals of the program by including language specifying that DASD teachers had to be offered the opportunity to teach any blended learning course first, but if no DASD teacher volunteered, the district would be free to hire outside teachers to offer particular courses.

Teachers

At various stages in the implementation of Ivy Academy, Burk and Mussoline needed to navigate challenges with teachers in the district. Initially, some teachers expressed skepticism about the appropriateness of blended learning for certain students or for certain content areas. Some had taken online courses as part of their own higher education, and found the classes unengaging or uninformative. There were also those that worried blended learning courses would not provide students with sufficient adult interaction key to their learning.

Teachers were also concerned about the impact on their role. Some feared that the proliferation of online content, both from other DASD teachers and from third parties, might result in fewer overall teaching positions in coming years. In addition, some were concerned that

while they were experts in classroom-based instruction, blended learning was something new. For these reasons, Mussoline thought it important that the program be opt-in for teachers. He hoped that over time, as teachers were able to build the required skills through professional development, and as they observed more students taking interest in and benefiting from the blended model, more teachers would become inspired to participate in the program.

“Blended learning is not just about the students, it’s also about the teachers.”
Burk knew that many might assume that teaching a blended course simply involves taking a conventional lesson plan and digitizing it, and she aimed to shift their thinking.

Teacher participation has varied significantly between Downingtown High School West and Downingtown High School East. Downingtown West Principal Kurt Baker attributes the lower participation numbers at his school to two things: veteran staff members were wary of undertaking such a large initiative, and as a new principal, Baker himself had little clout or credibility to encourage his people to take a chance on this new program. In addition to differences in participation levels between schools, there have also been differences in participation rates among departments. Initially, resistance to blended learning proved particularly strong among math teachers and world language teachers in the district, but in years two and three of implementation, more teachers in these departments have expressed interest and have participated in training.

Training Teachers for Blended Learning Success Creates Controversy

Providing teachers with appropriate training on how to develop and teach effective blended courses was critical to success. As Burk explains, “Blended learning is not just about the students, it’s also about the teachers.”¹⁰ Burk

knew that many might assume that teaching a blended course simply involves taking a conventional lesson plan and digitizing it, and she aimed to shift their thinking. With Mussoline’s support, Burk excused all teachers who volunteered to teach an Ivy Academy blended course from their regular professional development; instead, she led them in a four-week blended course that focused on the pedagogy of teaching in a blended model. Throughout the year, these teachers continued to meet as a group with Burk during regularly scheduled professional development time to discuss additional topics related to blended learning and to work to develop their Ivy Academy courses.

Once the first training cohort was underway, Burk and Mussoline encountered resistance from teachers who had not opted to participate. Some felt it unfair that the blended teachers were excused from traditional professional development duties, such as working to develop common exams. In response to this criticism, Burk adapted the training schedule in the second year of the program so that blended teachers would remain in some of their department meetings during professional development time.

Students

A key challenge Burk and Mussoline faced was balancing student interest in Ivy Academy courses with staffing needs. Many classes saw significant interest from students, with 16 or 17 students signing up, but these numbers were not sufficient given the enrollment requirement of 25 students. This rule was difficult for students who were eager to take the blended course as well as teachers who had invested time in training and adapting their course to a blended model. So, Burk and Mussoline revisited the issue with the Board and reached a solution: an Ivy Academy course with fewer than 25 students enrolled could run if offering the Ivy Academy course would not require more total sections to be offered. If offering the Ivy Academy course would require an additional section, the Ivy Academy course could not run.

Another challenge of implementation has been lower levels of student interest in certain types of blended courses. For example, while multiple blended math courses have been offered in the course catalog each year, low student registrations resulted in only one blended math course being offered in years one and two, and no blended courses running in the program’s third year. Mussoline and Burk are determined to achieve adoption across all departments over time.

Parents

In addition to the school board, union, teachers, and students, Burk and Mussoline discovered that parent support was also key to this effort. Many parents had questions and concerns about blended learning courses. Some were concerned their student would not learn as much as in a conventional classroom, and others doubted whether the technology would work properly. Additionally, some parents expressed concern about needing to purchase a device for their student (though the district would provide them to students based on need). Some parents worried that if Ivy Academy courses were more challenging, their student’s GPA might suffer, which would impact college admissions. Overall, there was skepticism among parents about having their student participate in a program so new and seemingly experimental.

Ivy Academy Results to Date

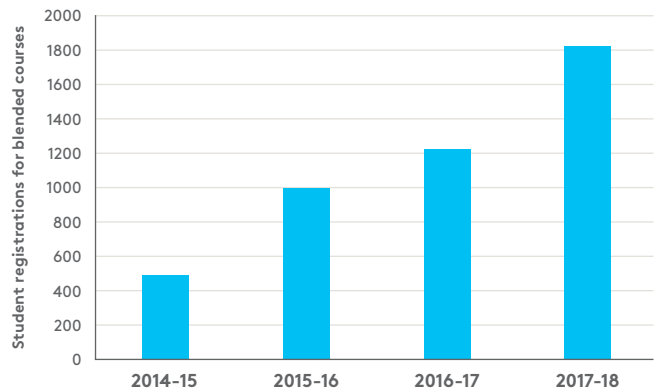
Student Participation and Satisfaction

In the program’s first year, there were 489 student registrations for blended courses, across all grade levels and across departments from English to Art to Business. Four years later, student interest in blended learning continues to grow, as evidenced by the 1,812 registrations in February of this year for 2017-18 blended courses (*Exhibit 2*). Another indicator of growing student interest in the blended program is that the percentage of unique students at DASD’s conventional high schools taking one or more blended course reached 22% in 2016-17 (*Exhibit 3*).¹¹

District leaders believe there are predominantly two types of students who have taken advantage of Ivy Academy courses to date. One group is composed of highly motivated, independent students for whom blended courses provided the flexibility to accommodate more classes in their schedule or to participate in more activities. The other group consists of students who seemed to dislike school or were unengaged in conventional classrooms. For these students, blended courses allow them to cut in half their time in the classroom and provide the flexibility to use the days outside the classroom to receive individualized instruction from the teacher.

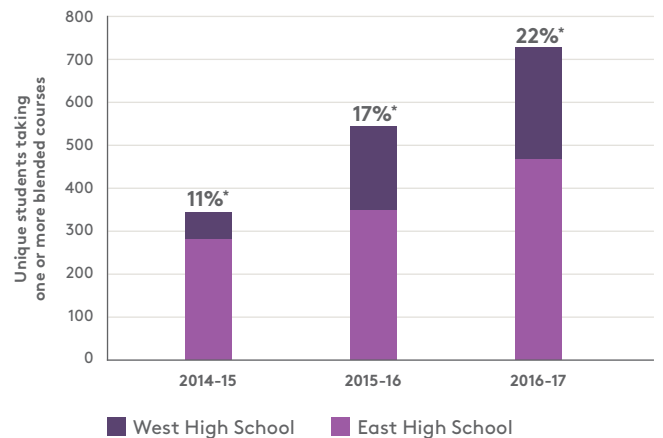
Students have reported very high levels of satisfaction with their Ivy Academy courses to date. In a recent survey, 91% of 450 students surveyed reported being either satisfied or very satisfied with their blended class. Further, 97% of the same students surveyed said that their blended classroom teachers were using effective technology tools, and that their blended teachers used more technology than conventional classroom teachers.¹²

Exhibit 2 REGISTRATIONS FOR BLENDED COURSES



Note: This graph reflects total blended course registrations, an indicator of student interest. Not all blended course registrations converted to student participation in blended courses due to the minimum enrollment of 25 students per blended course in order for the course to run.
Source: DASD

Exhibit 3 DASD CONVENTIONAL HIGH SCHOOL STUDENTS PARTICIPATING IN BLENDED LEARNING



*Percentage of all conventional high school students participating in blended learning
Source: DASD

In their comments, students expressed appreciation for the degree of flexibility to manage their own time and work. However, students agreed that greater flexibility was a double-edged sword, also presenting greater challenges. Many experienced a steep learning curve when managing their own time, but some students recognized this as being a skill worth building during high school to use in college or elsewhere. Some students were surprised by the rigor of Ivy Academy courses. They confessed they had expected the blended courses to be easier because the classes met only two days out of the six-day rotation, but they discovered this was not necessarily the case. In a recent survey, 53% of students said their blended class was harder than their conventional classes, with the remaining 47% saying their blended class was easier than their conventional classes.¹³ Overall, students agreed that Ivy Academy classes provided good learning

experiences and that their level of stress was lower in blended courses than in conventional courses, in large part because of the ability to manage their own time.

Teacher Participation and Feedback

When training was first launched, 24 teachers of the 240 total teachers at the district’s two conventional high schools opted into Burk’s training program, but in the first year of the program, SY 2014–15, only 19 of the 24 trained teachers taught at least one blended course due to enrollment numbers. Now in the third year of the program, a total of 84 teachers, or 35% of total DASD high school teachers, have gone through training, and 29 teachers are currently teaching blended courses through Ivy Academy (*Exhibit 4*).¹⁴ Teachers who have chosen to participate have had a variety of reasons for doing so, but in general share a willingness to try new things and are united by a belief that the courses would be good for students.

Teachers who have taught Ivy Academy courses reported that while they feared offering a blended course would be very time-intensive, they found it to be much less work than expected. Some noted that, in the first year, adapting the curriculum for a blended course can be a lot of work, but subsequent years have a greatly reduced workload as there is already a bank of material prepared.

Burk and Mussoline find the increases in teacher interest to be a positive sign. They are further encouraged by the feedback from teachers who say that their experiences with Ivy Academy have changed the way they are teaching their conventional, non-blended courses. One teacher explained, “I was so pleased with the way my blended course worked that I incorporated some of the methods into my traditional courses. Now, I do very little lecture; I do reading quizzes instead. The students read, come in to class, take the quiz, and then we talk about what they’ve read. And the students are fantastic at it.”¹⁵ In this sense, Ivy Academy is changing the culture of teaching in the district.

Academic Results

Since all Downingtown students in a given course take the same final exam, regardless of their teacher or course format (blended or conventional), DASD can easily compare results between students in the blended version of a course and in the conventional classroom. Burk notes, however, that it is difficult to draw definitive conclusions about the results for blended learning at this point because the sample sizes are small and because of the variation in the types of students enrolled in each course. The data available shows that students in blended classes have generally been performing about as well or better than their peers in conventional classes, with the exception of science. For example, the SY 2015–16

common summative final exams for English courses indicated that blended students outperformed their peers, with an average score of 80.5 compared to 75 for conventional classroom students. In contrast, however, students in blended science courses had an average final exam score of 63 in comparison to an average score of 69.7 in conventional science classrooms (*Exhibit 5*).¹⁶ The midterm results for SY 2016–17 were particularly strong for blended classes. Mussoline and Burk are committed to continuing to promote blended learning and have a strong focus on measuring results, hoping to further prove the success of this model with data.

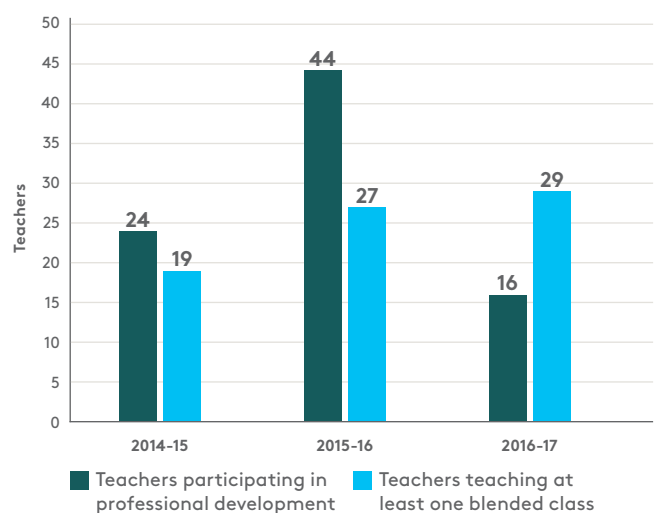
Reflecting on Ivy Academy: Lessons Learned

Ivy Academy now has nearly a quarter of all students at DASD’s conventional high schools participating, a growing cadre of teachers prepared to teach blended courses, and high levels of student satisfaction.

In examining this launch of Ivy Academy, there are some key lessons:

- **A skilled, talented project leader is essential**
Kristie Burk has been essential to the success of Ivy Academy. She had experience with blended, online, and conventional classroom teaching; she knew how to teach teachers accustomed to the traditional model to teach in a blended learning environment. Even more important has been Burk’s ownership of the program, Mussoline argues. Having her sole focus on the district’s exploratory efforts has been critical to success—she has been the blended program’s advocate. Mussoline’s advice to other

Exhibit 4 DASD HIGH SCHOOL TEACHERS WHO HAVE GONE THROUGH TRAINING AND NUMBER OF TEACHERS TEACHING BLENDED COURSES



Source: DASD

districts looking to implement similar programs: “Find your Kristie.”

• Allow innovation to grow separately

Much research seems to indicate that the skills necessary to sustaining a successful organization may in fact be almost antithetical to innovation. In their book *Lead and Disrupt: How to Solve the Innovator’s Dilemma*, Charles O’Reilly and Michael L. Tushman suggest that having an ambidextrous approach is key: an organization needs to have employees who are focused on continuous improvement of existing capabilities and incremental innovation, and employees who experiment with new opportunities that fundamentally change some aspect of the business.¹⁷ At DASD, Mussoline did this instinctively: he hired Burk and allowed her to develop the blended program, as opposed to deploying existing faculty to develop this project. As the innovation takes hold, it is growing increasingly integrated with existing practices.

• An opt-in approach eased change

For both students and teachers, being allowed to opt in to participating was important to building buy-in. Mussoline recognized that not everyone has the same level of readiness for change; understanding and allowing for resistance and allowing support to build over time has been important.

• The need to create buy-in cannot be overemphasized

Mussoline admits that if he were to start the process over, he would do some things differently. One change he would make would be to increase the focus on building buy-in among parents. He recalls, “The first year, we talked about the program as an experiment, and for parents, that was hard to understand. No one wants you to experiment with

their student. So, if I were to do this again, I would have more parent meetings.”

Similarly, Mussoline reflects that he would approach building support among teachers much earlier than he did. “The first time they heard this idea was when I walked into their faculty meeting in August and said, “This is what we are doing, and we are doing it *this year!*” So, I would do more ahead of time.” He suggests discussing in greater detail what blended learning is, what it would look like, how it would be implemented, and generally allowing for more lead time before the program launches.

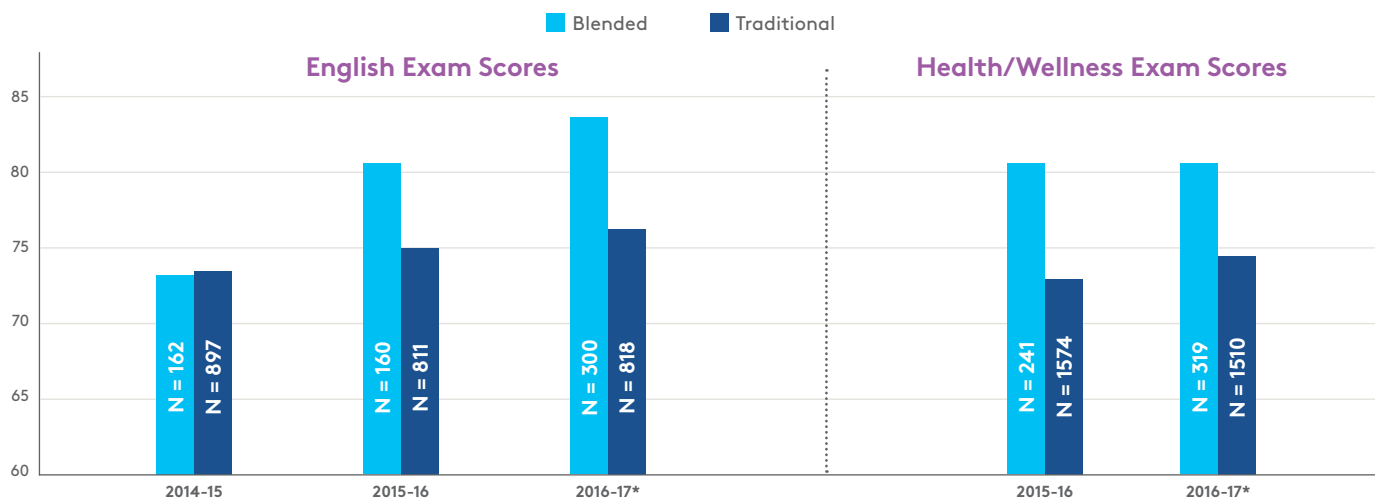
• Strong and sustained support from the top

Mussoline championed this effort throughout. Often, district leaders initiate an innovation and leave staff to run with the project. In the absence of continuous support from leadership, these innovations tend to fail. Mussoline had a vision for the blended program, and hired and charged Kristie Burk to lead the design and implementation. His confidence in Burk’s leadership and his ongoing support of her efforts were clear to all. He worked closely with Burk and remained engaged and supportive throughout; it was clear to all in the district that this program was a priority of the superintendent.

• Adjusting and iterating

To successfully innovate, there must be a spirit of continuous improvement and a willingness to adjust, modify, add, and discard. In response to complaints from teachers who had not participated in training that the blended teachers were excused from professional development duties, Burk adapted the training schedule in the second year of the program so that blended teachers would remain in some of their

Exhibit 5 COMPARISON OF AVERAGE SCORES ON COMMON SUMMATIVE EXAMS IN BLENDED AND TRADITIONAL COURSES



*2016-17 scores are for midterm exams, while other years indicate final exams

department meetings during professional development time. In addition, in the second year of implementation, Burk and Mussoline altered the schedule of Ivy Academy courses to meet three times per six-day cycle instead of two times per cycle as in the original design. This change was made in response to teacher and student feedback: they said that with the original model, it felt as if too much time passed between in-person class days; given the six-day cycle, holidays sometimes resulted in their not meeting face to face for as long as one and a half weeks. Additionally, the three times per cycle revision meant that they would meet in person every other school day, which was much easier for students to remember.

Looking to the Future

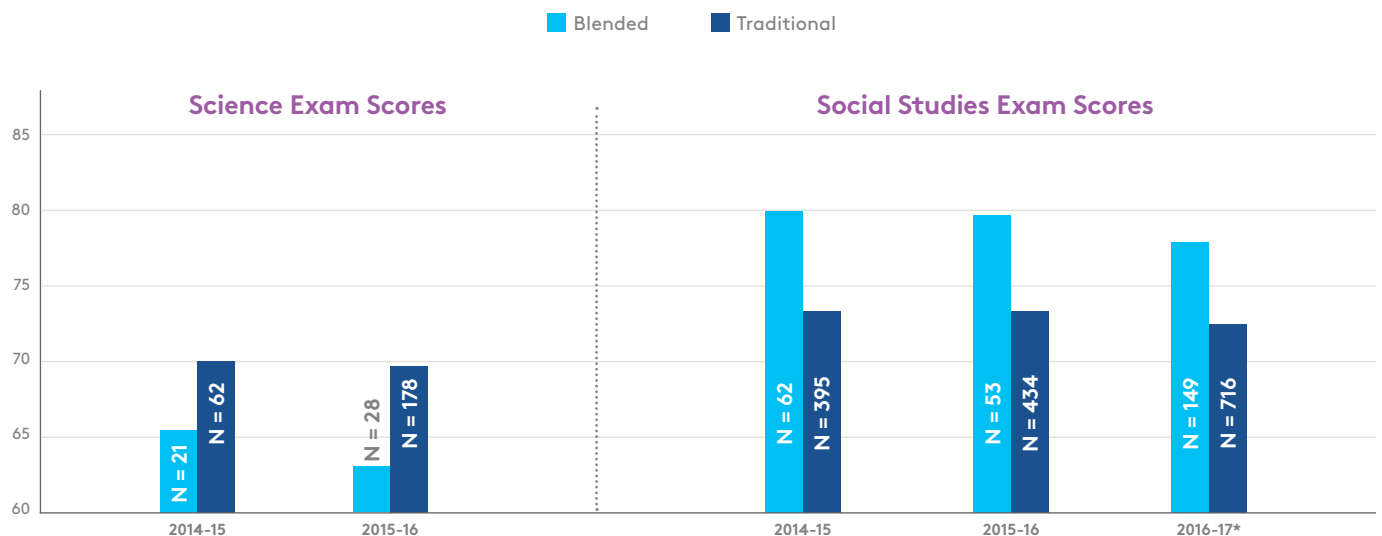
Three years into the program, nearly all district leaders at DASD expect student demand for Ivy Academy courses to continue, but there are somewhat differing perspectives. Some expect enrollment may level off, while others, including Mussoline himself, think it will grow dramatically. Mussoline also believes that teacher support for the program will continue to increase, and that district culture will continue to evolve as more teachers bring elements of a blended environment into their conventional classrooms. Ivy Academy, which was launched and nurtured somewhat separately and alongside the traditional model, is becoming increasingly integrated as it grows over time. In fact, it has become so integrated with the district's traditional schools that the program itself is now referred to as the Downingtown Blended Program instead of Ivy Academy. And, earlier this year, DASD's school board adopted a policy requiring that all students, beginning with the graduating class of 2021, take a blended or cyber course in order to graduate from high school.¹⁸

Mussoline has announced he will be retiring at the end of this school year after eight years in the district, but he is not worried about what will happen with the Downingtown Blended Program. With student enrollment in blended courses increasing each year, teacher interest in blended learning training firmly established, school board support well in place, and Burk's stewardship, Mussoline believes that the program is embedded: "It's not going anywhere. This is the future."

When asked what he would tell other districts looking to implement similar programs, Mussoline says, "I believe you can do this, regardless of your district size or demographics. And, you should do this! Somebody's going to eat our lunch if we don't start providing choices for kids." ♦

NOTES

1. Pennsylvania Department of Education, "2012 ED Facts State Profile: Three-year Comparison—Pennsylvania," <https://www2.ed.gov/about/inits/ed/edfacts/state-profiles/pennsylvania.pdf>.
2. Pennsylvania School Performance Profile, "Downingtown Area SD," <http://paschoolperformance.org/Profile/135>.
3. Downingtown Area School District, "State and National Rankings," <http://dasd.org/Page/4730>.
4. John J-H Kim and Daniel Goldberg, *Ivy Academy: Blended Learning in Downingtown Area School District* (Boston, MA: Harvard Business School Publishing, 2016), 2.
5. *Ibid.*, 3.
6. Downingtown Area School District, "Downingtown Area School District Strategic Plan," <http://www.dasd.org/cms/lib8/PA01916467/Centricity/Domain/42/Downingtown%20Area%20School%20District%20Strategic%20Plan.pdf>.
7. Kim and Goldberg, *Ivy Academy*, 4.
8. *Ibid.*
9. *Ibid.*, 3.
10. *Ibid.*, 6.
11. Downingtown Area School District data.
12. Lawrence Mussoline, "Scaling a High School Blended Learning Program" (presentation, DMGroup's Superintendents' Strategy Summit, New York, NY, January 11–13, 2017).
13. *Ibid.*
14. *Ibid.*
15. Kim and Goldberg, *Ivy Academy*, 8.
16. Mussoline, "Blended Learning Program."
17. Charles A. O'Reilly and Michael L. Tushman, *Lead and Disrupt: How to Solve the Innovator's Dilemma* (Stanford: Stanford Business Books, 2016).
18. Downingtown Area School District, "Active Policies," <http://www.boarddocs.com/pa/down/Board.nsf/Public#>.



Source: DASD