



Building Capacity for Blended Learning

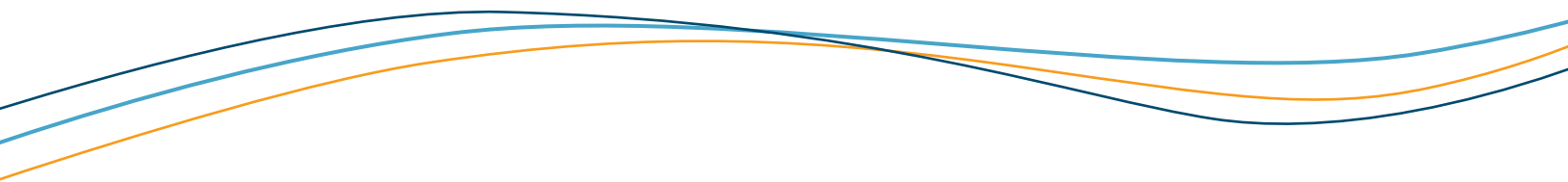


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INTRODUCTION

Blended learning—a formal education program in which students receive both online and face-to-face instruction—is becoming an important fixture in the American educational landscape. According to the Innosight Institute's seminal report, *The Rise of Blended Learning* (Horn & Staker, 2011), in 2000, 45,000 K–12 students used digital content. In 2009, there were approximately 3 million students using digital content. Greene and Hale's 2016 review of the literature indicates that as many as 9 million students could be involved in blended learning today (citing DeRuy, 2015).

At Edgenuity, case studies from across the country provide solid evidence that blended learning can improve student academic trajectories.

- Rio Rancho Cyber Academy (Rio Rancho, New Mexico) students who participated in Edgenuity courses outperformed their peers on the Partnership for Assessment of Readiness for College and Careers (PARCC) English language arts and mathematics tests for three years straight.
- From 2015 to 2017, the percentage of Village Green Charter School (Providence, Rhode Island) students who achieved proficiency on the PARCC ELA/Literacy Test more than doubled after using Edgenuity courses in a blended format.
- Blended learning students who participated in Edgenuity courses in the Pasadena Independent School District in Texas made significant improvements on the STAAR EOC Algebra 1 and Biology assessments from 2014 to 2015.
- Putnam County Schools in Tennessee increased their graduation rate from 86 percent in 2008 to 92.6 percent in 2015 after implementing the Edgenuity blended learning program.
- By midyear (fall 2017 to winter 2018), more than 60 percent of Flex Academy Charter School (Little Chute, Wisconsin) Edgenuity students exceeded yearly growth expectations on the MAP Growth Reading and Math Assessments.
- From 2016 to 2017, School District of Lee County students in Florida demonstrated statistically significant gains on the Renaissance Star Reading assessment.
- After implementing Edgenuity, Santa Cruz Valley Unified School District #35 (Rio Rico, Arizona) elementary school students significantly improved their performance on the MAP Growth Reading and Math Assessments from fall 2018 to winter 2019.

While recent meta-analyses support the conclusion that students can learn even better from blended learning than from more traditional pedagogies (Means et al., 2013; Pane et al., 2013), technology alone is no guarantee that students will achieve. As the U.S. Department of Education notes in the 2016 National Education Technology Plan, “leaders need to create a shared vision for how technology best can meet the needs of all learners and to develop a plan that translates the vision into action” (U.S. Department of Education, 2016, p.3).

Researchers have identified five critical components that contribute to the successful implementation of blended learning programs: collaborative leadership, culture, classroom practice, professional development, and infrastructure. Each of these components is described below.

COLLABORATIVE LEADERSHIP

The implementation of a successful blended learning program requires consensus from multiple stakeholders at both the school and district levels. It requires building out technological capacity and infrastructure, developing a clear model and vision for instruction to ensure deeper learning, securing ongoing funding, and making available the necessary professional development to help teachers and administrators master a unique, differentiated instruction model.

To do all this, collaborative leadership is the key. Defined by Ibarra and Hansen as “the capacity to engage people and groups outside one’s formal control and inspire them to work toward common goals—despite differences in convictions, cultural values, and operating norms” (2013, p.10), collaborative leadership requires districts to move away from top-down leadership models and instead adopt a side-by-side leadership mindset.

Districts develop and grow successful blended learning programs by bringing together a diverse and collaborative leadership team. While many of these team members will work at the district office, truly collaborative teams include teachers and staff who work at the school or classroom level. Gonzales and Hawthorne (2015) call this “developing your leadership dream team” (p.34). The Dream Team should consist of educators who represent a variety of district departments, including the superintendent, the treasurer, curriculum teams, and the technology services and instructional technology staffs (Gonzales & Hawthorne, 2015).

- As the leader of the district, the **superintendent** is essential to the development of a blended learning curriculum. This does not mean the superintendent should lead the team, but he or she should absolutely be a part of it, ensuring that the program suits the learning objectives of the district. The superintendent should step in and lead if the team looks at options that conflict with the district’s adopted mission statement, and be willing to discuss all options explored by the Dream Team.
- As the steward of the district’s financial resources, the **treasurer** must be involved in designing and planning the blended learning program. Decisions should be made in the best interests of students and teachers—not based solely on cost, but with careful consideration of value. There are times the treasurer will need to play devil’s advocate so that the team knows what is feasible, and what financial outcomes might result from implementation decisions.
- Members of the **curriculum team** are vital to planning, designing, and implementing any new learning program. Blended learning is a pedagogical approach that requires significant changes to traditional curriculum resources, and the curriculum team will ensure that resources and strategies are aligned with district standards and values. Additionally, curriculum staff are best able to identify which existing resources must be replaced and which can be adapted to work in a blended learning environment. It is essential that the curriculum team include teachers who are eager to participate in the new program, as they will be integral to implementing the program and securing buy-in from any skeptical colleagues.
- The **technology services team** is responsible for the district technology infrastructure, which will be the backbone of any excellent blended learning program. While blended learning is an instructional model and not a technology plan, well-designed programs require targeted infrastructure that directly affects the end-user experience. It is important to have the technology services team on board during the planning stages, so that technology gaps can be identified and addressed before they become problematic.
- The **instructional technology staff** is responsible for making sure that all team members’ voices are heard. They serve as the bridge to bring the leadership team together. Their role is to facilitate conversations and ensure that each member of the team has the opportunity to have his or her voice included in the overall program design and implementation. As the staff that will have the most hands-on experience with the technology and infrastructure, it will fall to the instructional technology staff to synthesize the goals, expectations, and possibilities for the program, and make it happen.

Establishing the leadership team is the first step in the collaborative leadership process. The next step is defining clearly articulated goals that are SMART—specific, measurable, attainable, realistic, and time-bound (Doran, 1981). Some districts may set goals about raising graduation rates while others may be concerned about college and career readiness. Whatever the goal of the program, it should be specific—*Raise scores for students with Individualized Education Programs (IEPs) on the upcoming PARCC assessments by 10 percent*—and set by the entire team.

SMART goals should address three distinct questions (Thompson, 2012):

1. What is the result that we want to achieve?
2. Why do we want to achieve that result?
3. How are we going to achieve the result?

Academic data should be a primary driver for answering the “what” and “why” questions (Digital Learning Now, 2015). Leadership teams should analyze current data, upcoming mandates, and student assessments to decide what results they want to achieve from their blended learning model. Once these questions are tackled and clear goals are established, only then should districts explore “how” to achieve them via the design of a blended model. In most cases, consensus can be reached through open conversations that include all members of the collaborative leadership team, facilitated by those members well-versed in instructional technology.



Rio Rancho Cyber Academy—Rio Rancho, New Mexico

BACKGROUND

The Rio Rancho Cyber Academy (RRCA) serves nearly 160 students in grades 6–12 in Rio Rancho, the third largest city in New Mexico.

The school prides itself on its hybrid setting, merging evidence-based, traditional teaching methods with the latest technological advances in curriculum-interactive distance learning. This allows students to benefit from both small group and one-on-one tutoring sessions with skilled teachers, while applying the online structure for learning in school and at home. RRCA works to ensure that all students achieve 100 percent completion of their assigned coursework within a school semester, along with a minimum 70 percent mastery of the content. Because Edgenuity is available to students 24 hours a day, seven days a week, all students can take the time they need to meet this goal; some students spend more hours on coursework and others spend less.

Implementing Edgenuity, RRCA has raised four-year graduation rates for these students from 40.5 percent in 2009 to 71 percent in 2017. With 74 percent of students scoring proficient in English language arts and 50 percent of student scoring proficient in math, RRCA is the number one high school in PARCC in the district. What's more, RRCA students have consistently outperformed their peers across the state on the PARCC assessments since the state implemented the assessment in the 2014-15 school year.

In 2018, for example, while 74 percent of RRCA students achieved proficiency on the PARCC English language arts test, only 39 percent of students did in the state. Similarly, while 51 percent of RRCA students achieved proficiency on the 2018 PARCC mathematics test, only 21 percent did in the state.

BUILDING A STRONG LEADERSHIP TEAM

RRCA proves that when blended learning programs are well-structured and valued at both the school and district levels, student success increases—something the staff at the school witnesses daily.

When the school implemented Edgenuity as part of its blended learning strategy, “it was important for the credibility of the program and for district buy-in for us to build a collaborative team that would steer the introduction of blended learning implementation,” says Heidi Kenworthy, Online Program Manager at RRCA. “In the beginning, you have to build a reputation that online learning is just as rigorous as traditional learning, and having the curriculum team on board from the start helps to solidify that reputation and lend credibility to a new, exciting program.”

RRCA's blended learning program began with an interdepartmental team drawn from the entire Rio Rancho education community, including instructional leaders, staff from the informational technology and curriculum teams, educators and assistants who would eventually work at RRCA, members of the school board, and parents. By creating a whole-school selection committee to choose the best online program for RRCA students, collaborative leadership and buy-in was a bedrock principle of the school—ensuring a long-term commitment to the program and investment in its success.

The power of a strong, collaborative leadership team to implement blended learning with measurable results.

“Quality technology gives students and teachers everything they need for success. Data allows us to work together in the moment to provide instant personalized learning. These are not naturally high-achieving kids. These are kids with a strong community of educators who work together to motivate them to become high achievers.”

—JACQUIE MONCLOVA,
RRCA PRINCIPAL

“Everyone is on the same page. The key is continual open communication and shared decision-making.”

— JACQUIE MONCLOVA,
RRCA PRINCIPAL



Once the school chose the program, the work began to ensure that collaboration continued to benefit both students and teachers—ensuring success for the entire school community. From weekly meetings with the whole staff to development of a blended learning agreement for teachers that allowed for mentoring, monitoring, motivation, and management, to a communication plan that would immediately identify challenges and aid teachers in tackling them, RRCA ensured that seamless collaboration took place at all levels, from the start.

With such clear structure, teams of educators, administrators, parents, and students were able to set and support clear academic goals in literacy and math, from daily learning to higher-level testing, with an eye toward:

- Increasing PARCC scores
- Increasing graduation test competency
- Increasing four-year graduation rates
- Reducing credit failure

Established goals were measurable and regularly considered, with the data easily pulled from the Edgenuity program to allow for frequent, clear assessments of student growth, success, and challenges—making growth attainable through collaboration.



CULTURAL CHANGE

Once a collaborative leadership model with shared goals is established, bringing a blended learning program to fruition requires the kind of day-to-day change that begins in classrooms. For blended learning to become an integral part of the culture of the district, teachers must be committed to the change and enthusiastic about the possibilities. As with all other curriculum implementations, teachers are the lifeblood of any successful blended learning program.

When we consider the culture of the school as a set of instructional values, traditions, and beliefs ingrained in the fabric of the educational community, the idea of cultural change offers both promise and pause for districts looking to implement a blended learning program. Cultural change does not happen overnight, and can create significant growing pains for those with longstanding ideas about educational practices. Proper implementation depends on a leadership team that sets clear goals and acts in support of those goals (Horn & Staker, 2015) and, in turn, ensures that teachers are prepared to successfully adopt new technologies and pedagogies (Gonzales, 2013; Shaunessy, 2007).

Districts new to blended learning can expect some educators to readily embrace the concept while others show an initial reluctance. Those educators who are open to the idea of blended learning often view it as a technical change—an additional tool to foster success in their classrooms. For these teachers, blended learning aligns with their personal values and beliefs, and so they simply need information and time to implement the change (Powell & Kusuma-Powell, 2015). Other teachers will view the same change as an adaptive change—one that requires them to rethink deeply held values and beliefs about education (Powell & Kusuma-Powell, 2015). While attitude toward blended learning is unique to each teacher, it can evolve from skepticism to support with appropriate professional development (Shaunessy, 2007).

Knowing whether educators view blended learning as a technical or adaptive challenge is the first step to successful classroom-level implementation. In addition to personal conversations and small-team discussions with teachers, districts and schools should consider using the iNACOL Blended Learning Teacher Competency Framework as a self-assessment tool for teachers, to help them understand how they view the adoption of blended learning.

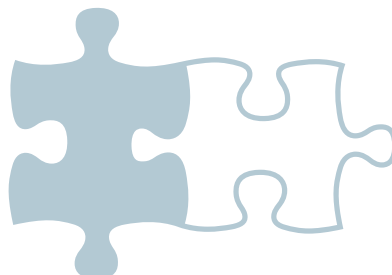
To build capacity, districts should include and support teachers who view blended learning merely as a technical challenge early in the implementation. These teachers will become agents of cultural change, easing the way for their more hesitant colleagues. Once these teachers find success as blended learning leaders in their schools, they will begin to share those experiences with their colleagues, increasing school-level buy-in and expediting the pace of cultural change. Teacher leadership behaviors such as blogging, presenting (at conferences and in their own schools and district), mentoring colleagues, and publishing will influence the attitudes and beliefs of their colleagues (Becker, 1999). Teachers who engage in regular pedagogical conversations with their peers are more likely to begin to appreciate the classroom opportunities that blended learning will bring (Shaunessy, 2007). Fostering success in the team of teachers ready for blended learning will increase the adoption rate of their colleagues who require additional convincing.

Even with initial successes, there are likely to be setbacks on the road to building a blended learning culture. Trusting relationships and a faithful commitment to blended program goals will allow teams to maintain open and honest discussion and to view mistakes as opportunities for learning. These strategies are essential to schools becoming more resilient and innovative (Hoy, 2006). Teachers need to know they have the support of their administrators and colleagues as they implement new models of teaching and learning. Honest dialogue that values truth over compliance will go a long way toward growing a culture of blended learning.

Innovation in education can be particularly challenging because change has the potential to affect student achievement (Duty & Kern, 2014). Creating a culture of innovation also requires structure and process, capacity, resources, policy environments, and learning agendas (Duty & Kern, 2014).

- **Structure and process** includes the formal systems in schools, some of which may need to be altered during the transition to blended learning. It also includes the habits of stakeholders and how those habits are reinforced (Duty & Kern, 2014). Building a blended learning culture may require educators to build new habits.
- **Capacity**, in terms of culture, is less about physical capacity and more about mindset and the ability to carry forward the blended plan (Duty & Kern, 2014). Districts that have capacity will exhibit a growth mindset and show diligence and patience in their pursuit of blended learning.
- **Resources** include the obvious financial considerations, but also include time and team resources (Duty & Kern, 2014). Successful districts will pay particular attention to balancing time and human considerations to keep the culture on track.
- **Policy environments** include federal and state regulations, as well as district policies that enable or prevent the changes needed to support blended learning (Duty & Kern, 2014). District leaders need to look for ways to make blended learning easy and attractive to implement.
- **Learning agendas** should include an emphasis on measuring progress and managing the change process (Duty & Kern, 2014). Progress should be measured against the SMART goals created by the district leadership team and by student achievement data.

Ensuring that a blended learning program is successful requires monitoring and frequent revision to continually meet program goals, and building a blended culture should be considered a work in progress, requiring commitment and support at all levels. Supporting the shift to a blended learning culture will pay huge dividends for students and teachers in the future.



Flex Academy—Little Chute, Wisconsin

BACKGROUND

A charter school founded by 15-year teaching veteran Kent Swanson, Flex Academy began with 53 students in grades K–8 in one room of the local public library, in the smallest geographic area in Wisconsin. It is now housed in a state-of-the-art 9,000-square-foot space and serves 100 elementary school students, using a blended learning model that accommodates both in-school and out-of-school learning.

Coming from both home-school and traditional school environments, students at Flex Academy are in classrooms for two to three days a week, and work outside the school for the rest of the week with full access to Edgenuity, allowing the six teachers in the school to continually monitor student work no matter where they are. The school is designed to support student and parent involvement in education in a unique way, combining student interests and needs with service learning and a strong health and wellness component.

PRIORITIZING STUDENT MASTERY AND SCHOOL COMMUNITY

“It’s complicated!” Swanson says of the Flex Academy model. “It’s complicated, but it works. We’re a next-generation school for a new generation of students.” This is the heart of the culture at Flex Academy.

Established in 2011, the school began with Swanson’s vision. Recognizing the power of technology to engage, motivate, and educate, Swanson was already implementing blended learning strategies in his classroom in a curriculum that he calls “educational leadership through technology.” He saw the potential for scaling his classroom-level approach into a school, and worked to convince district leaders, parents, and other teachers that his vision could be made manifest.

Now, Flex Academy students are working at different paces and on different projects whenever they are in school, with an eye toward mastery-based learning. This flipped classroom approach “is something we see much more frequently in high school, but it works even better for younger learners,” Swanson says. He believes the constant differentiated instruction students receive with Edgenuity doesn’t simply teach them, but also teaches them how to learn. “They understand that they move forward only when they’ve mastered the skill they’re working on. They learn early to value mastery.” And if a student struggles? “A teacher jumps in immediately. Teachers are able to see the data in real time and immediately pull a small group together for an intervention . . . which is how it should be.”

After extensive research on future-ready schools and technology, Swanson approached district leaders with a plan for a school that would provide student mastery, real-time data and student assessment, and a world of real-life opportunities beyond school walls. An online curriculum is only a piece of the Flex Academy puzzle. “Our first goal was to build community—which is not easy for a school that is brick and mortar only a few days a week,” Swanson says. “It meant a commitment to a whole-school culture.”

Flex Academy invests in this school culture in myriad ways.

- **Teachers:** Teachers are involved from the ground up in building Flex Academy. They help establish the school’s essential standards, outlining the curriculum that students must cover with mastery-based learning. They are invested in students’ digital learning, accessing data in real time, daily and weekly, constantly re-evaluating student needs and their own instructional practice. “We need to simplify aspects of what teaching is in the 21st century,” Swanson points out when talking about supporting teachers. “Let teachers do what they do best. The computer can take care of much of the quizzing and testing and leave time for instruction.”
- **Students:** With students on school grounds only two or three days a week, collaborative, engaging work is essential. Each

week, students join a “Flexcursion,” a site-based learning opportunity focusing on some aspect of their curriculum. These 125 experiences throughout the year make for a collaborative work experience for the students and keep them connected to the school. When they are in school and using Edgenuity, teachers at Flex often push students to challenge themselves using the safe environment of Edgenuity. “Difficult digital work gives them an opportunity to struggle,” Swanson says. “And that’s how we are able to see how students really feel about their learning.”

- **Parents:** “The integration of parents into our school community is essential,” Swanson says. Flex Academy has a full professional development program for parents of enrolled students, encouraging parents to step into the role of “learner coach” and take ownership of their children’s learning when they are not in school.
- **Community Partnerships:** In 2011, knowing Flex Academy could not sustain itself with 52 students in one room of the library, Swanson went to the local YMCA and proposed a partnership. In exchange for access to the YMCA facilities for physical education, conference space for teachers, meeting places for teachers and students, and computer and Internet access for students, Flex Academy would build a service-learning curriculum that helped the YMCA in their community work. The program was a win-win, ensuring that the school and the YMCA were embedded in the community, and providing students with a powerful sense of community service by working with children and families in need, local law enforcement, and more.

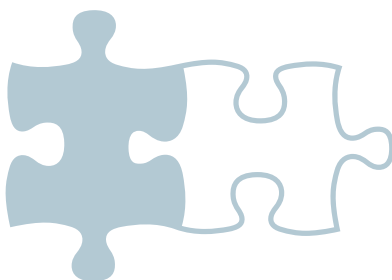
The investment in blended learning and community is undeniable.

- **From fall 2018 to winter 2019**, student using Pathblazer demonstrated statistically significant growth ($p < 0.05$) in four domains on the MAP Growth Reading Assessment and four domains on the MAP Growth Math Assessment.
- **In math**, by midyear, 70 percent of Flex students had exceeded their end-of-year goals on the MAP Growth assessment.
- **In ELA reading**, by midyear, 61 percent of Flex students had exceeded their end-of-year goals on the MAP Growth assessment.

Building a school from scratch isn’t easy, but Swanson is very clear about the biggest challenge he faced—and continues to face. “Efficiency: managing all the nuts and bolts, the moving parts. Finding time to take stock and celebrate the successes. And there are many.”

“When I’m asked about how it all comes together, I tell people that we have T-shirts that promote the school,” Swanson says. “They read, ‘Flex Academy: It’s complicated.’ And it is. But it works.”

—KENT SWANSON,
LEAD TEACHER



Utah Online—Washington County, Utah

BACKGROUND

Developed in Washington County, Utah, to serve students around the state virtually, Utah Online has been in operation since 2002, serving more than 150 high school students fully online, and another 850 students in a blended learning program using Edgenuity.

While the virtual portion of Utah Online serves a cross-section of students, from professional athletes and actors to homeschooled students and students who struggle in a traditional classroom environment, the blended learning portion of the program is targeted to two distinct groups: students who require immediate credit recovery, and students who are eager to take on accelerated coursework and graduate early.

After implementing Edgenuity courses, Utah Online saw graduation rates increase from 76 percent in 2012 to 88 percent in 2014, and students' ACT scores were also higher.

Embedding blended learning into every aspect of school culture, ensuring teacher satisfaction and student success.

CULTURAL CHANGE COMES FROM A HOLISTIC COMMITMENT TO STUDENT SUCCESS

Everything at Utah Online begins with student needs. When the school completed its first year of a high school curriculum, the school community identified a single goal: increasing the graduation rate of students, which at the time was 76 percent. Knowing the goal would require significant changes across the board, Utah Online staff and administration came together to develop clear strategies to help students.

“Good ideas come from examining the best practices of others,” Lisa Mitchell, Academic Counselor for the school, says. “As a team, we looked at as many schools as we could find to explore what they were doing and how it was working.” In doing so, Utah Online allowed the teachers to direct program development, ensuring buy-in, commitment, and engagement in the hard work that was to come. “We started small,” Mitchell adds. “We completed pilot programs, analyzed results, drew conclusions, formulated better ideas. We had the support of our administration, so we weren’t afraid to try anything.”

Every member of the Utah Online community was involved in developing a program that would work—learning by actions, creating curriculum and culture with purpose, and ultimately, doing what was best for students.

Once the school community settled on a blended learning curriculum for Utah Online, it required a long-term commitment to showing the administration what blended learning could do for students—specifically, increasing graduation rates.

The possibilities of the program were not enough, however. Teachers wanted to understand how the content could inspire and engage students. This keen understanding of the subtle difference between the way teachers and administrators think—content vs. credit—led to a critical moment in Utah Online’s development. Though the big-picture goal was about graduation rates and credit recovery, the day-to-day goal for teachers and students was about content recovery. Focusing on content recovery gave teachers the freedom to build programs that inspired students to learn, not to hit a numerical goal, but for love of learning itself. Credit followed content, and all goals were ultimately in reach.

“We were learning as we created something that was good for students and their future. And we were personally driven because of our deep commitment and passion for kids.”

—LISA MITCHELL,
ACADEMIC COUNSELOR

Building a strong, supportive culture isn't a process with an end, however. Small successes at Utah Online helped to increase buy-in from the entire school community. Regular, real-time data pulled from Edgenuity allowed teachers to see the way blended learning could work day-to-day for even the most hard-to-reach students. Professional learning communities met monthly to ensure teachers were receiving the support necessary to implement blended learning strategies in their classrooms. And once the first high school was up and running, the staff there began to mentor staff at other schools in the district, helping them implement blended learning with their own special flair.

When the unique culture of each location had been established, the team turned to teacher recruitment. First, existing teachers self-selected into the Utah Online blended model. After that, the district "recruited teachers who knew the work we did with content recovery," says Mitchell, "or those who were interested in blended learning. This made onboarding easy, because there was familiarity and interest from new teachers."

Implementing blended learning can worry teachers, however. "The model enables students to take online courses in place of a brick-and-mortar course," Mitchell explains, "and so teachers began thinking, 'Kids are going to start taking online courses and we are going to be out of a job.' Which of course we know isn't true." Listening to those concerns is essential to developing a strong school culture, however, and the work of administrators at the school level is to ensure that teachers understand the remarkable value of their presence and work.

The secret to ensuring that teachers feel safe and supported in schools with blended learning? "Creating trusting relationships," Mitchell says. "We encouraged others to engage in collaboration and to share best practices and ideas for collective ownership. We encourage camaraderie; we are all in this together. We celebrate the things that work, and we regroup when things don't work. But we do it together."

But school culture isn't only about administrators and teachers. Utah Online has also done exceptional work in engaging students and parents in blended learning, instituting programmatic transparency to ensure that the entire learning community understands the way blended learning works, and encouraging a schoolwide commitment to a single goal: student success. "Parents are very excited that there are more options for their students," Mitchell says. "And students no longer think that taking a class online makes it easier. They know better. And they know we are all working hard to reach a common goal—for them."

"What we have seen is that great teachers have not lost student enrollment numbers, and those who have lost enrollment numbers have felt pressure to continue their own learning and further develop their practice."

—LISA MITCHELL,
ACADEMIC COUNSELOR

CLASSROOM PRACTICE

After building a collaborative leadership team, defining concrete program goals, and committing to developing a supportive culture, the next step in building capacity for blended learning is to focus on classroom practice. This can be the most challenging step for educators, as it may contradict their long-established pedagogy or their evaluation process. But it often culminates in a stronger, more rewarding instructional experience.

Research shows that many students prefer a blended learning environment partially due to the fact that blended learning combines the best elements of online and face-to-face instruction to create rich learning environments that engage students (Jeffrey et al., 2012). Blended courses are most successful when rigorous face-to-face activities are aligned to online learning activities (McGee & Reis, 2012). The key to student engagement in blended learning is making the experience relevant to them (Jeffrey et al., 2012). Jeffrey, Milne, Suddaby, and Higgins identify three critical stages of student engagement in blended learning:

- At the start of the course
- During the course
- Re-engaging the disengaged

At the start of the course, teachers pique student curiosity (Jeffrey et al., 2012), providing interesting and meaningful coursework. As is the case with traditional learning environments, teachers who trigger student curiosity in blended courses create conditions in which students feel compelled to learn to satisfy their curiosity (Housand & Housand, 2012). Blended coursework also needs to be relevant to students for engagement to occur (Jeffrey et al., 2012). Teachers who understand their students' interests will be able to adjust learning activities so that they are more relevant to individual students, as well.

Using formative pre-assessments is a common strategy to ensure that the coursework is meaningful to students. These assessments allow teachers to create a strong presence (Jeffrey et al., 2012), set clear benchmarks and goals for students, and ensure that students understand the supports available to them as they progress through their coursework.

Because blended learning relies on a synchronized combination of both online content delivery and teacher-led instruction, it is essential for teachers to have clear classroom strategies and guidelines, to avoid confusing students (Jeffrey et al., 2012). The transition to blended learning may be confusing to some students and clarity on the part of the teacher will enable students to make the transition more quickly. Teachers in a successful blended learning environment are not only thinking about course design, but also about effective, immediate instructional support for students who need it.

Research shows that students who feel appropriately challenged by their learning are more likely to remain engaged throughout the course (Jeffrey et al., 2012). Excellent curriculum design balances rigor with the promise of mastery, which means blended coursework needs to be in the zone of proximal development for each student.

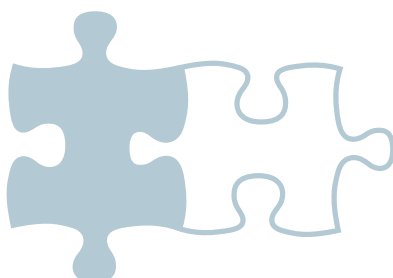
Students are more motivated by authentic learning tasks (Jeffrey et al., 2012), wanting to understand how their learning has real-world applications. For example, studies show that student writing improves when students write for real audiences (Putnam, 2001). Furthermore, research indicates that encouraging students to engage with content in active ways promotes transfer of learning (National Research Council, 2012).

With this in mind, blended classroom teachers must provide timely and detailed feedback to students, ensuring that they will learn from both their successes and setbacks (Jeffrey et al., 2012) and remain on their learning path during their course. Effective ways of engaging students in content include elaboration, questioning, and explanation (National Research Council, 2012)—for example, asking students to explain to themselves what they are learning online as well as ask themselves questions such as “Did I check my answer?” “How do I know if my answer is correct?” and, “If my answer is not correct, what other strategy should I use?”

It is just as essential that students have a voice in setting their learning goals as it is that teachers hold them accountable to those learning goals. Using data, setting learning goals, and frequently checking for understanding in blended learning courses are all successful strategies to re-engage students in their blended course (Swan, 2003; Hamilton et al., 2009).

Successful teachers consistently monitor student progress (Jeffrey et al., 2012), allowing for immediate intervention should a student falter. Early intervention will keep students engaged and prevent them from falling too far behind. Teachers should set clear, measurable goals with struggling students to re-engage them in their learning (Jeffrey et al., 2012).

Research shows that students' intrinsic motivation predicts their academic performance. Students who are motivated perform higher on standardized assessments, are more confident, and demonstrate greater satisfaction with school (Jeffrey et al., 2012). Experts agree that teaching students to set achievable goals, monitor their own progress, be persistent, and track their own achievements helps to improve motivation (Usher & Kober, 2012). Blended classroom practices designed to boost student motivation will help build capacity for blended learning across schools and districts, while ensuring student success.



School District of Lee County—Ft. Myers, Florida

BACKGROUND

The School District of Lee County comprise the 33rd largest district in the nation, serving the community of Ft. Myers area in Florida. Edgenuity is in all of the 96 schools in the district, serving more than 93,000 students in K–12. Secondary students in the district have one-to-one Chromebook access, while elementary school students have two-to-one access.

In the 2008–2009 school year, Lee County rolled out Edgenuity content districtwide in grades K–5, ensuring that every elementary school student in the district had access to digital content in their classroom. The goal was to provide students with technology that did more than drill students on learning; Lee County was committed to implementing technology programs that provided independent practice and assessment, ensuring the 5,500 teachers in the district had access to technology as a partner in the classroom.

SUPPORTING INNOVATIVE CLASSROOM PRACTICE

Classrooms in Lee County vary from school to school and room to room, and blended learning has made innovative classroom practice commonplace in the district. “When we went looking for district-wide instructional technology, we knew we wanted something that did real instruction,” says Karen Babor, the coordinator of instructional technology for the School District of Lee County. “We didn’t want practice. We wanted a program that reflected the best teaching: direct instruction, supported practice, independent practice, assessment. And that’s what we found with Edgenuity. That’s why it works in our schools—because we were already doing that. Now we have help.”

“It’s like having another teacher in the classroom.”

Using Edgenuity as part of a blended learning curriculum, Lee County’s elementary schools use Renaissance Star data to place every student on an individualized learning pathway, accommodating both learning gaps and unique learning styles.

- **For students working below grade level**, Edgenuity content is used to fill in gaps and build bridges to in-class content, taking pressure off the classroom teacher to backfill skills.
- **For students on grade level**, Edgenuity is constantly assessing skills, ensuring that knowledge is learned and flagging struggles for the classroom teacher.
- **Students above grade level** are challenged by Edgenuity content that pushes them beyond the grade-level standards they have already mastered. The higher-level content is pushing gifted students to focus, listen, and learn in a way they’ve never had to before.

“It is incredibly difficult to serve every student every day in classrooms with a broad range of learning abilities,” Babor says. “But with Edgenuity as an instructional partner, teachers have more time and more capacity.” This is especially important in districts like Lee County, with high teacher turnover rates both at the school and district level. Lee County has created its own reporting system that integrates Edgenuity with other technology in the district and reports to teachers in real time—enabling them to alter their instruction in real time. “We’re making it easier to do a very difficult job.”

With 75 percent of the schools in Lee County using blended learning curriculum, teachers are able to hone their individual classroom practice. “Every teacher is using Edgenuity in a different way, which allows for some very innovative classrooms.” During their learning life in the district, students might find themselves in a flipped, student-centered classroom that is almost exclusively small-group and project-based, or in a classroom centered on more collaborative direct instruction, with learning centers and small group work.

“What’s more, students are learning to easily articulate their own needs for assistance when they are struggling, and aren’t afraid to ask for help,” Babor says. “They know that they aren’t always going to learn the same skills, the same way.” She tells a story of a 5th grader learning long division. “Everyone tried to teach it to him—teachers, family members, other students. But when he came to his long division learning pathway on Edgenuity, it just clicked. That’s why we love having it in our schools. It’s just another way of making sure kids learn.”

As with all new programs, the most difficult early hurdle for implementation was teacher buy-in, but Babor is quick to add, “Edgenuity integrates into every kind of classroom, which makes teacher buy-in much easier than you might expect.” She adds, “That, and the fact that it works.”

Students using Pathblazer in Lee County evidenced significant gains in reading comprehension on the Renaissance Star assessment during the 2016–2017 school year. On average, Edgenuity students improved from a Renaissance Star Reading National Curve Equivalent (NCE) score of 43.78 to a posttest score of 50.7, resulting in a statistically significant gain of 6.26 NCE points.

“Being able to show teachers that the program works goes a long way,” Babor explains. What’s more, the teachers who are most committed to using a blended learning model in their classrooms are also happy to open their classrooms to other teachers and discuss the intricacies of their classroom practice. Those schools with teachers who are invested in the program (Babor calls them “high-flyers,”) have higher percentages of implementation than schools without those teachers, because this kind of “casual” professional development is going on regularly.

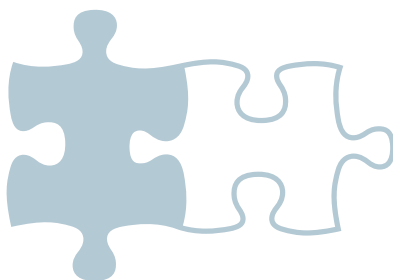
With help from Edgenuity, Lee County’s two-person instructional technology team provides professional development in schools that need it. During these sessions, they meet with the entire school staff, then in break out groups with each grade level to go through the grade-level resources available and to help teachers understand how Edgenuity can help teachers meet student needs, meet grade level standards, and increase student success.

The most important piece of teacher buy-in? Stability, says Babor. “We don’t have to convince kids that it’s a great program. They know it when they get into the classroom and experience their own learning. But teachers need to know it is a commitment, that the program isn’t going away. Once they know that, they’re more willing to try it.”

She adds, “I know I keep saying it, but there is immense confidence that comes from seeing the students learn and succeed with the program. It’s easy to get buy-in once the teachers see that it works. The number of times we hear kids say, ‘Edgenuity taught me that!’—it’s hard not to believe in it.”

“I can teach something 10 different ways, and then I’d put the kids on Edgenuity, and the kids who still didn’t get it—suddenly it clicked.”

—KAREN BABOR,
COORDINATOR OF
INSTRUCTIONAL
TECHNOLOGY



Village Green Charter School—Providence, Rhode Island

BACKGROUND

The Village Green Virtual Charter School in Providence, Rhode Island, opened its doors in September 2013, welcoming students in grades 9 and 10 into a blended learning model that includes both in-classroom teaching and an online curriculum via Edgenuity. Students attend full-day classes five days a week for the entire school year. Approximately one-half of entering students require some kind of remediation. There is also a special three-year graduation option available to students who wish to work toward that goal.

Ensuring that online curriculum and face-to-face instruction are seamlessly integrated to serve every student.

The school day is structured to combine student-directed online work and teacher-directed skill and strategy instruction. This allows teachers to design unique, as-needed lessons, immediately assessing learning needs and addressing those needs in the moment. The result is a targeted, accessible, engaging classroom experience that ensures teacher satisfaction and student success.

In 2015, the 9th and 10th grade students at Village Green took the PARCC, with results that were less than ideal: Only 16 percent of students scored proficient or above. After two years of a specially designed curriculum that involved unique, differentiated coursework for each student, the 2017 scores on the same test showed impressive gains. Proficiency rose to 40 percent, which was the single highest gain of any high school in Rhode Island.

INTEGRATED CLASSROOM PRACTICE AND ONLINE CONTENT

In a blended classroom, it is critical for teachers to align face-to-face instruction with online content; this is the heart of Village Green's educational strategy. In both math and ELA classes, teachers use Edgenuity content as a jumping-off point to create vibrant, interactive lessons.

- **In math courses**, teachers begin the class in a whole-group format, providing a broad overview of the lesson students will be working on. Students are then moved to online coursework or small-group sessions—all involving the Edgenuity lessons, but often also including offline assignments so teachers and students can work together on the concepts.
- **In ELA courses**, teachers often begin with a whole-class read-aloud of the assignments, allowing students time to ask questions from which the entire group can learn. Having learned from one another and from the teachers, students then set to work on their online coursework.
- **In other subjects**, teachers have the freedom to tailor coursework and instruction to individual students, providing each learner with a mix of online curriculum and one-on-one instruction to ensure individual success.

"The key is relationship building. Each teacher has an advisory group in which students set goals, check their progress, and are able to set clear goals and ask for additional support. That's when teachers get to work creating unique lessons that support individual student learning."

—ROBERT PILKINGTON,
FOUNDER

Through this structure, Village Green teachers are able to innovate on the fly in the classroom, providing real-world examples that relate to content in the moment. Teachers teach in pairs, so one can provide a broad lesson while the other works to motivate and engage individual students. This method of classroom practice allows for workshops, special group projects, and supplemental learning activities designed to pique student interest. The team at Village Green finds that when students do hands-on work—writing constructed responses instead of answering multiple-choice questions, for example—not only do they retain their learning, but they also engage more thoroughly in the coursework.

Students at Village Green are given a significant amount of control over their education, from choosing their coursework to setting the timeline for their graduation; therefore, goal-setting is essential—and classroom practice must be designed to assist students in reaching those goals. Teachers at school are true educational facilitators, supporting learning by empowering students to make their own choices and direct their own work.

For those students who need additional remediation to close skill gaps, Village Green sets aside the 9th grade year to bring students up to grade level. The school uses the NWEA MAP assessment as a diagnostic test, then places students in classrooms that will give them a chance to grow alongside similar learners. But, says school founder and operator Robert Pilkington, “No two students are alike, and no two Village Green students are receiving the same learning experience. We modify and customize the Edgenuity program for each kid, with a high degree of personalization. Teachers here are hand-building coursework for students.” With the help of the customizable program, Village Green has 192 courses for 225 students, built from 45 different Edgenuity base courses. “We’ve become very facile, very quickly able to ensure that every kid gets the right course for him or her,” says Dr. John Butler, Director of Academic Planning and Logistics.

The school is currently working to develop an ideal course to meet both the science standards in the state of Rhode Island and those tested for in the New England Common Assessment Program (NECAP)—two sets of standards that occur simultaneously but have little overlap. “Using Edgenuity programming, we’re trying to build the perfect science course,” says Pilkington. “This course does not exist in the state of Rhode Island, but we can build it now, thanks to technology.”

Of course, this kind of hands-on course design and commitment to personalized instruction requires unique teaching plans. Students who need additional assistance or who have set goals for accelerated study have access to weekend coursework, to afterschool programs, and to summer school in July. In August, the school is open to students who would either like to start their work early, or require extra time to ensure the 100 percent progress expected of them before they advance to their next course.

Teachers at Village Green are invested in the rituals and routines of this new blended curriculum, as well as in what Pilkington refers to as the school’s “core philosophical tenets. We know exactly where our kids are, and this allows us to meet them there. This is a learning system that is malleable and makes it easy to personalize instruction—which is a moral imperative. Our job is to do something for every student to help them succeed.”

“I could never go back to a traditional non-blended learning school where one size fits all. That’s not how kids are. When you have the data, it creates a moral imperative to do what you can to ensure that students have the best chance for success.”

—ROBERT PILKINGTON,
FOUNDER

PROFESSIONAL DEVELOPMENT

While teaching culture is a key component in the success of blended learning, and enthusiasm and buy-in are essential to that, it’s no surprise that professional development opportunities are a significant piece of long-term teacher success and satisfaction. Strong professional development can help to reinforce and build positive attitudes and beliefs around blended learning. Effective professional development to support teachers in their transition to blended learning is so important that the ConnectED initiative of the federal government authorizes the use of Title II funds to cover professional development services.

Effective professional development teaches all major stakeholders to bring collaborative leadership, culture, and classroom practice together while creating a blueprint for classroom instruction. Additionally, professional development helps teachers motivate students, develop high-impact behaviors that improve student learning, and collect and analyze data to drive instruction.

The United States Department of Education’s 2016 National Educational Technology Plan notes that existing professional development programs may not be effective in helping teachers implement technology-rich education models, such as blended learning (U.S. Department of Education, 2016). Therefore, more effective models of embedded, personalized professional

development that use technology to reach teachers and go beyond the walls of a single building are essential to developing a successful blended learning program.

As blended programs grow in size, so should professional development opportunities. When funding is scarce, train-the-trainer programs are essential to ensure that teachers have the on-the-ground, building-level support educators need, and online offerings that allow for easy, near-instant scalability.

Many school districts enrich their professional development offerings with technology. While traditional teacher professional development occurs at a set time and place (often before or after school), online professional development resources empower teachers to take advantage of learning at a time that is convenient for them. What's more, exposing educators to professional development online provides them with first-hand understanding of how blended learning can enhance the educational experience. This is especially important for teachers working in blended learning environments, so they can best understand their students' experiences in the classroom.

There are myriad ways to implement online professional development. The University of Central Florida and Kennesaw State University offer Massive Open Online Courses (MOOCs) to meet the demand for online education about blended learning. Other organizations create online repositories of resources that support blended learning and include links to recorded training sessions, online resources, and areas for teacher collaboration. The goal is to infuse technology into professional development, broaden the access that teachers have to professional learning resources, and encourage them to model appropriate uses of online learning for their students.

Regardless of delivery format, effective professional development must allow for collaboration (Darling-Hammond, 2013). Perhaps the best way to develop a culture of collaborative learning for teachers is through ongoing professional learning communities (PLCs) that eschew top-down instruction in favor of a culture of equal contribution (U.S. Department of Education, 2016). Successful PLCs remain focused on student learning, support a culture of collaboration, and are results-oriented (DuFour, 2004). PLCs can grow organically or be organized within a school or district, and can allow teachers to learn about and explore blended learning in a casual, collegial environment. PLCs may start within a school or district, but many will reach out to blended learning thought leaders and experienced teachers through social media. The collaborative nature of PLCs encourages teachers to implement different aspects of blended learning, knowing that they have the support of their colleagues.

Just as blended learning is designed to personalize education for students, professional development on blended learning should focus on unique educator learning needs. Professional development opportunities should be personalized for teachers and take into account their levels of expertise with blended pedagogy and technology (U.S. Department of Education, 2016). This can be done in a number of ways, including:

- Personalizing professional development by offering teachers a menu of relevant sessions and allowing them to choose the ones they find most meaningful
- Using informal walkthrough data to identify areas where teachers need the most support, and providing it
- Surveying teachers on their needs—similar to a formative assessment in the classroom—to determine their starting point, and allowing teachers who are proficient with certain technologies or aspects of blended learning to opt into more advanced professional development offerings

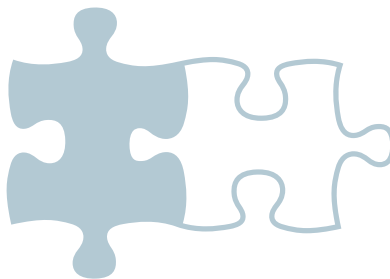
Coaching is a professional development model that is both job-embedded and personalized, relying on a personal relationship between the coach and educator. To ensure success, a coaching relationship requires trust, honest dialogue, reflection, feedback, and commitment (Berkowicz & Myers, 2015). Coaches work to understand the individual needs of teachers and design learning goals that build on teacher strengths to adopt new skills. While coaches should provide feedback to teachers, they should not be directly responsible for teacher evaluations, as educators who are more focused on evaluation than implementation will be less likely to innovate.

Proper selection of coaches is essential to the success of any coaching program—particularly those related to blended learning (Berkowicz & Myers, 2015). Aside from being experts in blended learning pedagogy and practice, coaches must be able to build honest, trusting relationships with teachers. Some districts use digital learning coaches or instructional coaches, who support all the teachers in a specific school, while other districts use professional coaches on a contract basis. Using coaches from outside the district helps to bring a wider range of backgrounds and experiences to the district, avoids the trap of doing things the same way because “that is the way it’s always done,” and may save costs, since these coaches can be paid on a contract basis.

Good coaches spend time observing and supporting teachers with their classroom instruction, increasing the “capacity to create environments in which people feel safe and want to experiment with the new ways of doing things” (Berkowicz & Myers, 2015, paragraph 8). Research shows that effective coaching helps to establish a growth culture—which is essential in bringing a blended learning program to scale (Myers, 2015).

Districts that are successful with blended learning also provide opportunities for their teachers to connect with blended learning teachers and experts across the globe. One good way to gain exposure to new and existing practices in blended learning is to attend national conferences such as the annual conference of the International Association for K–12 Online Learning (inacol.org) and the Future of Education Technology Conference (fetc.org), or a state educational technology conference. “Unconferences” such as EdCamps are another resource for conversations about blended learning. Social media is also an excellent medium educators can use to connect and learn about blended learning.

The most successful models of blended learning include professional development that embodies the best practices of blended learning. They value teacher voice and ownership in professional development—a strategy that results in student agency and ownership in the classroom-level blended learning model. The best professional development models are personalized to the needs of the teachers and provide resources in a variety of formats. Coaching is an effective model to support teachers in their transition to blended learning.





HOPE Online Learning Academy Co-Op—Douglas County, Colorado

BACKGROUND

Now in its eighth year, HOPE Online Learning Academy Co-Op serves students in grades K–12 in Douglas County, Colorado, the state's sixth largest county. The school prides itself on providing students—many of whom are at risk—with “an individualized approach to the learning process,” allowing students to learn both online from home and at one of more than two dozen community-based learning centers with experienced mentors and teachers for one-on-one academic support.

Each learning center lab is staffed by a highly qualified teacher and a paraprofessional mentor, both of whom work directly with students. Teachers provide blended instruction and work with individual students to help advance learning, while mentors motivate students, monitor progress on coursework, and assist with the Edgenuity online course management. This structure requires comprehensive professional development, providing educators with the support and skills they require to address unique student concerns daily.

PROFESSIONAL DEVELOPMENT IS THE KEY

“Professional development is essential for any strong educational program,” says Christyn Holmes, HOPE's Director of Academic Services. “It strengthens knowledge and pedagogy. We know that.” But a blended learning program for students requires more complex, far-reaching professional development. “Teachers need to know about technology, about 21st-century skills,” Holmes says. “When we first started, mentors were lab monitors. And then we saw that through professional development, we could help our teaching staff to become diagnosticians of student learning.”

Through targeted professional development—specific to the intricacies of blended learning—HOPE teaching staff are now aligning instruction with the unique structure of the school.

HOPE professional development is similar to the blended learning environment itself. Teachers receive whole-class instruction and in-person synchronous small groups, facilitated by a coach or administrator. They also have access to online learning opportunities, just as their students do—asynchronous web conferences, Google hangouts, individual webinars, and specialized online coursework via the local university.

This comprehensive professional development is enhanced with district-level peer coaching, ensuring that instruction receives immediate feedback and recommendation. As Holmes explains, “The key is the transition from resource-based ‘here, take this, it’s available to you’ methods to a sound analysis of practice through regular observation and proactive feedback.”

Coaching and mentoring are essential at HOPE—another thing that the teachers experience alongside their students. As students are mentored, motivated, and engaged by the teachers and support staff in their labs, so too are the staff. Each HOPE teacher has an administrative coach who observes and mentors the teacher, helps to analyze student data, and collaborates on next steps for instruction, ensuring that every educator at HOPE has the support required for success. Additionally, HOPE has a literacy specialist on staff, and a dedicated coach for new teachers who helps educators understand HOPE's unique academic program.

Providing educators with quality professional development to ensure both student and teacher success with blended learning.

“Edgenuity isn't just a program we use. It is built into the classroom experience, supplementing the work of teachers and mentors. That is the product of a clear focus on blended professional development.”

—CHRISTYN HOLMES,
DIRECTOR OF ACADEMIC
SERVICES

“Student data is the starting point for all professional development.”

—CHRISTYN HOLMES,
DIRECTOR OF ACADEMIC
SERVICES



Teachers and mentors are encouraged to choose the PLCs that best suit their areas of interest. “In each PLC we like to have people with a variety of specialties,” Holmes explains. “Some people are content-driven, grade level-specific, ELL specialists, learning disability experts, or organizationally focused.” In the Edgenuity-focused PLC, educators work to align the program to offline, district, and state-wide curricula, ensuring that the program will provide the best results for HOPE students.

As a blended learning program, the HOPE team spends much of their time focusing on student data, mining data from PARCC, internal benchmarking, direct instruction, and Edgenuity. “Student data is the starting point for all professional development,” Holmes says. “If we discover that students are proficient in writing summaries but need more focus on analytical writing, the team gets to work on developing specialized professional development for what students need in that moment.”

“Through coaching, professional development at HOPE is ongoing. It happens every day, through conversations at lunch, joint planning periods, prep time, and professional learning communities focused on Edgenuity.”

—CHRISTYN HOLMES,
DIRECTOR OF ACADEMIC
SERVICES

INFRASTRUCTURE

Building a successful blended learning program begins with people, which is why the first four critical areas of successful implementation focus on building an effective team, developing culture, making transitions in classrooms, and providing support for educators during the change to blended learning. Once all four of these components are in place, blended programs require the right infrastructure to succeed.

Infrastructure covers a wide range of technology that must operate seamlessly to ensure that teaching and learning are supported. From software and hardware to wireless infrastructure and Internet bandwidth, technology should serve as a tool for learning—always there, always functional, and rarely noticed. District technology leaders (essential to the collaborative leadership team) should design the infrastructure to allow for at least 1 Mbps per student of Internet bandwidth and at least 1.2 access points per classroom (Shellabarger, 2015). The leadership team must have a clear plan and act together to ensure the infrastructure is robust enough for immediate blended learning needs (Digital Learning Now, 2015), with goals for scalability and future demand (Digital Learning Now, 2015).

Blended learning infrastructure requires thoughtful device selection, something that varies from district to district and classroom to classroom. Many districts consider one-to-one initiatives as a way to combat the digital divide; in addition to providing equitable access for students, selecting a single device for classroom use offers schools other benefits. Teaching in a one-to-one classroom can be less stressful for teachers, who can plan blended lessons knowing what technology their students will be using. Technology staff members benefit from becoming experts in troubleshooting a limited number of devices.

Bring-your-own-technology or bring-your-own-device initiatives are the obvious alternative to one-to-one learning. These allow students to supplement school-provided technology with their own, and can empower students to see their personal devices as portals to learning outside their school.

Regardless of whether districts decide to go with a district-provided device or allow students to bring their own, students, teachers, administrators, and parents should be involved in determining the district device philosophy and selection, and any device selection discussion should address unique learning needs as well as accessibility for students who face economic barriers. Successful blended learning programs include a wide variety of stakeholders throughout the device selection process.

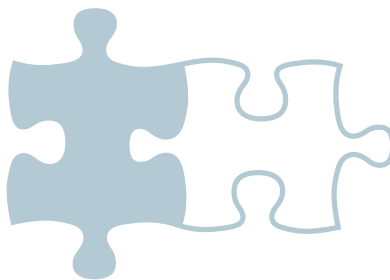
Blended learning infrastructure also includes responsible use and privacy/security considerations (U.S. Department of Education, 2014). Many educators view students as digital natives who are adept with the digital language of the Internet and computers (Prensky, 2001), but students will require an understanding of the ethics associated

with digital learning. Responsible use policies and instruction are based on educating students about what they should do with technology, versus outdated acceptable use models in which students were instructed what not to do with technology (Bosco, 2013). Adopting and implementing a responsible use model allows districts to teach students digital citizenship skills using direct instruction and, more importantly, to do it on an ongoing basis by taking advantage of authentic learning experiences (Bosco, 2013). The direct instruction on digital citizenship will include teaching students about Internet privacy and security considerations.

During implementation, districts should also identify their philosophy on interoperability—the compatibility of various software systems across the district—in the planning process. Having the leadership team agree on a set of values around interoperability will enable leaders to ask the right questions when selecting future software purchases. It is important that all members of the collaborative leadership team agree to the same philosophy. Interoperability is still limited between many software systems (U.S. Department of Education, 2016) but, when possible, it enables the better flow of data between systems and creates a more robust body of knowledge for educators who are striving to personalize learning for students (U.S. Department of Education, 2016).

Technology-rich classrooms also bring an opportunity to redesign the physical layout of the classroom. Traditional classrooms have a presentation device and the teacher at the front of the class delivering content. With blended learning models, teachers are no longer tied to the front of the room. In fact, the best blended classrooms allow for individual data monitoring, targeted instruction in small groups of students, and free movement of the teacher and students based on day-to-day or even moment-to-moment learning needs. This freedom will likely require changes in the physical layout of the classroom, with classroom furniture that is more mobile and designed for flexible learning arrangements. Allowing teachers and students to try various arrangements and find the best fit for their classroom has shown to be effective with early blended learning schools (Greenberg, Medlock, & Stephens, 2011).

Technology infrastructure includes a variety of considerations, including bandwidth, wireless connectivity, end-user devices, responsible use, and interoperability. While the technology infrastructure may not be the most personal of the five components of successful blended learning programs, it is essential to the long-term success of the program. When the infrastructure is in sync, no one will even think twice about it. Only careful planning and implementation will make that happen.





Santa Cruz Valley Unified School District #35—Rio Rico, Arizona

BACKGROUND

Ten miles from the Mexican border, the Santa Cruz Valley Unified School District #35 (SCVUSD) serves a community of 3,600 students in five schools: two K–5, one pre-K–8, one middle school, and one high school. As a majority of the students in the district are second-language learners, SCVUSD uses the Sheltered Instruction Observation Protocol (SIOP) instructional model in all schools.

Due to its location, the district's student body is highly transient, and there is also high turnover of school faculty and staff. These factors make blended learning a valuable tool in ensuring all members of the school community have access to the data and supports they require. Every elementary school classroom in SCVUSD uses a blended learning model.

Ensuring the entire school community has access to data and supports.

COMMITTING TO INFRASTRUCTURE THAT SUPPORTS LEARNING

SCVUSD operates on a standard five-day in-school instructional model for all students, with early release Wednesdays for students, allowing for weekly professional development for teachers. Since 2010, the district has committed to cultivating an environment rich in instructional technology, using a state education grant earmarked for professional development to focus in large part on the use of technology in the classroom.

Serving a highly transient community of second language learners, SCVUSD has emphasized differentiated instruction since before technology was brought into the district's schools. "Differentiation is possible without technology, but it's very difficult," says Jennifer Prusak, the technology integration specialist at SCVUSD. "It takes a lot of time and planning, and makes whole-group instruction an enormous challenge, because so many are at such different levels."

In 2011, facing an underperforming high school and high rates of teacher turnover, district leaders in SCVUSD applied for and received a state education grant to invest in educational technology and began the work of restructuring schools and curriculum to adjust the learning environment to better support the needs of students.

"We realized very quickly that we didn't have the infrastructure to do it right," Prusak says. Schools in the district had no access to WiFi, teachers had no laptops in the classroom, no document scanners, virtually no guarantee of available technology. "Our first step was committing to building that infrastructure." District leaders immediately hired a technology integration specialist to do a full audit of technology in SCVUSD at the district, school, and classroom levels.

Working with the curriculum team at the district level, that specialist was tasked with "clearing out the cobwebs of digital products," Prusak says, and reallocating funds to tools that would work and better serve students, all while ensuring that each new product was easily integrated into existing curriculum and assessments. "We would never have had this success if we hadn't invested first in a strong, centralized team focused on big-picture ideas, with technology on the ground from the start."

The process wasn't easy, Prusak explains. Teachers were skeptical of new technology, school leaders argued that money could be better spent on other resources, and the infrastructure simply wasn't there. "For three years, I was responsible for daily manual data entry: centralized logins, student progress uploads, reports on transient students, whatever was necessary," Prusak says. "But even then, we were beginning to see the proof that technology could change the work of our teachers and the success of our students. So we kept with it."

In 2014, after three years of stretching the resources and staff required to run technology-based learning across the district, SCVSUD began purchasing programs, establishing tech protocols, investing in professional development to ensure teacher comfort with the technology, and celebrating student successes with the technology. This commitment is visible at every level of the district.

- **Teachers:** Every teacher in SCVUSD now has a WiFi-connected laptop, on which they can access real-time student data to constantly adjust instruction, clarify lessons, and immediately intervene with small groups. Teachers are also using their laptops to pull weekly student reports to establish learning baselines and create dynamic weekly learning groups. This laptop is supplemented with an in-classroom document scanner and a projector for small-group and whole-group instruction.
- **Students:** Elementary school students in the district are required to have two hours per week of dedicated lab time (one hour for math, one for ELA), during which they access Edgenuity on Chromebooks. In addition, most classrooms have an extra five to eight computers with access to Edgenuity, making small-group instruction possible any time, without taking away instructional time from other students. The district has also implemented the CLEVER single sign-on portals for students, to ensure ease and speed of access, so students maximize instructional time with Edgenuity.
- **Schools and Districts:** SCVUSD has doubled its Internet speed every year and tripled it during school year 2018-19. In 2018, the district received a state education grant for fiber-optic Internet, with one gigabyte of connection.
- **Home:** When choosing technology, the district is careful to select programs that are supported on Chromebooks, tablets, and mobile phones, as many families in the district only have Internet access via cellphone. This allows parents and families to support in-school learning by accessing Edgenuity at home and over the summer.

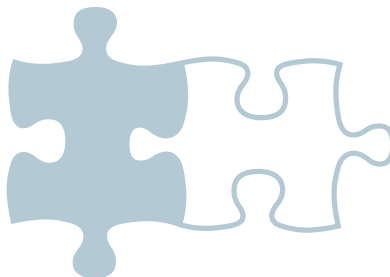
This widespread, thoughtful investment in infrastructure across all levels of the school district has produced impressive data.

- **Test scores are going up.** Students demonstrated statistically significant growth across all domains on the MAP Growth Reading and Math Assessments from fall 2017 to spring 2018 after using Pathblazer in their classrooms.
- **There's a measurable decrease** in the "summer slide" with students who use Edgenuity during summer months.

"Once the technology was up and running, it became clear that we were being more efficient with everyone's time," Prusak says. "Teachers' time became focused on student learning, and students' time became time for active learning."

"The clear connection between Edgenuity and NWEA MAP results helped us make the jump from 'tech for the sake of tech' to 'tech as a tool to help students move forward.'"

—JENNIFER PRUSAK,
TECHNOLOGY
INTEGRATION SPECIALIST





Classical Academies—San Diego County, California

BACKGROUND

Founded in 1999, Classical Academies serves 4,200 K–12 students in three independent public charter schools in North San Diego County, California. The organization’s mission is to prepare students for college, career, and citizenship by partnering with families, offering rigorous academics, fostering social and emotional learning, and providing academic choice.

The right infrastructure to implement the best programs to ensure student success.

At its three sites, Classical Academies enrolls a diverse array of students, ranging from homeschoolers, athletes, and actors to gifted, traditional, remedial, at-risk, and medically fragile students. In 2013, the schools set out to provide more flexible learning options that would better differentiate instruction and create more time for conferencing with students and parents.

The Academies serve students in one of four distinct ways:

- A four-day school week program where high school students use Edgenuity courses for approximately 60 minutes per day, per subject
- A blended instructional program where high school students use Edgenuity courses three days a week at home and receive face-to-face workshop instruction two days a week at school
- An online learning program where students complete Edgenuity courses at home and meet with a teacher every five weeks
- A full-time independent study program where students are supported by certified teachers

DESIGNING AND IMPLEMENTING THE RIGHT INFRASTRUCTURE FOR DIVERSE STUDENT NEEDS

Once it decided to implement a blended learning program to serve a variety of learners, Classical Academies faced the challenge of developing the right infrastructure to ensure quality implementation and success for all students. Recognizing that unreliable Internet connectivity, inadequate bandwidth, or problems with hardware or software could hinder students’ ability to use the program, a team of experts in district and school technology worked closely with the Edgenuity team to design a system that would ensure student success. The team—comprised of technology and learning experts—took into account student and educator needs within each of the blended learning models across three schools. Additionally, the school carefully developed a network of seamlessly integrated software, including student information systems, learning management systems, and course curriculum.

Technology staff was well-trained on each program and prepared to handle any problems that arose with implementation. Classical Academy Online has a dedicated technology specialist who is regularly available but not on site. “The school operates on a ticket system for any issues with our technology, and teachers and staff are always in place to jump in,” says Dr. Stacey Perez-Carrasco, Academy Online Principal. “However, in my four years as principal of Online, I have only had to ad-lib a handful of times.”

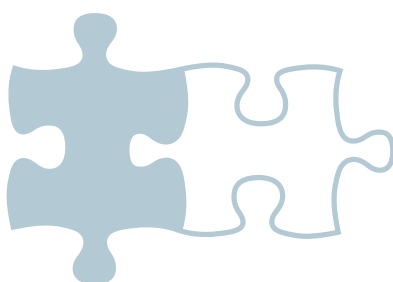
Classical Academy Online is entirely online, with students working off site and teachers monitoring work virtually, which required excellent building-level bandwidth and Wi-Fi for staff. The Academies also designed a comfortable, welcoming cyber café in a standalone structure that houses the school’s independent study program. Knowing that the program would serve hundreds of students across the learning spectrum, including students with disabilities, designing a flexible learning space was critical. All students and teachers are able to use any portions of the workspace, which made smart design essential. In concert with the organizational technology department, “We researched multiple school sites before deciding on programming, technology, and specifics,” says Perez-Carrasco.

“As a charter school, our main limitations were how many students we would enroll and how successful they would be in a blended learning program,” Perez-Carrasco adds, underscoring the importance of infrastructure that could be easily scaled. To ensure equitable access to computers, the school decided to purchase Chromebooks for student use, and encourages a bring-your-own-technology program for those students who are able to do so, which requires additional support in school and in the cyber café.

Thanks to a committed, engaged staff and a strong infrastructure, the Classical Academies blended learning program outgrew its existing space in three years. Entering its fourth year, the cyber café has doubled in size, from 6,000 to 12,000 square feet, requiring a fresh assessment of technology needs, resulting in additional Wi-Fi, bandwidth, and hardware, as well as space for onsite collaborative workshops.

When considering a successful blended learning program, security is of course an important issue. Classical Academies has a security protocol for both hardware and software, which is monitored and implemented by technology department staff. Additionally, students are required to attend a Success Skills week at the start of the school year, which is dedicated to the ethical and responsible use of technology. Workshop teachers continue these conversations around ethics and responsibility in twice-weekly workshops.

“Good planning goes a long way. Building a solid infrastructure takes creative solutions, ongoing problem-solving, and anticipated growth,” Perez-Carrasco says. But infrastructure is just a small part of the whole. “The most important aspects of a successful blended learning program are personalization, communication, and mastery-based instruction,” she continues. “The best programs leverage instruction, provide personalization, and empower students to have control over their learning.”





CONCLUSION

Blended learning, which combines face-to-face and online instruction, remains one of the fastest-growing trends in education today. While research shows that the careful integration of online and face-to-face instruction has the potential to pave the way for broader and deeper content, strong, effective blended learning doesn't just happen. It requires collaborative leadership, strong culture, rigorous classroom practice, practical professional development, and robust infrastructure to ensure blended learning success. As the case studies in this report show, schools and districts that thoughtfully plan their initiatives see powerful, transformative outcomes for their students.

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