BREAKTHROUGH MODELS FOR COLLEGE READINESS

AN INTRODUCTION TO NEXT GENERATION LEARNING SCHOOLS

AT A GLANCE

SCHOOLS: 41

- **New:** 33
- Turnaround: 4
- Redesigned: 4
- **District:** 11 (4 with a Partner) Charter: 30 (3 with a Partner)

GRADES SERVED:

- K-8:7
- Middle School: 6 •
- 6-12:13
- High School: 15

STUDENTS IN FALL 2015: 17,562

- Fall 2012 Cohort: 3,493
- . Fall 2013 Cohort: 9,065
- Fall 2014 Cohort: 3,790
- Fall 2015 Cohort: 1,214

STUDENTS AT CAPACITY: 27,906

- Fall 2012 Cohort: 5.200
- Fall 2013 Cohort: 12,036 .
- Fall 2014 Cohort: 8,816
- Fall 2015 Cohort: 1,814

SHARED ELEMENTS

Breakthrough model schools:

- Serve low income and underserved students
- Encourage mastery of Common Core State Standards as well as demonstration of deeper learning skills
- Target middle and high school grades and/or postsecondary transitions
- Prepare students for success in college and beyond
- Represent a new breakthrough design (that didn't previously exist)
- Integrate seven design principles (esp. personalized, blended, and competency-based learning)

Can you imagine what the next generation of blended schools looks like in the United States? That's the bold challenge that Next Generation Learning Challenges (NGLC) issued to school developers, operators, and teacher-entrepreneurs. Two consecutive waves of grant funding known as Breakthrough School Models for College Readiness invited proposals for new and redesigned school models that aligned with a set of <u>school</u> design attributes and prepared traditionally under-served students to succeed in college and beyond.

NGLC aimed to build on the foundations created and tested by the pioneers of blended learning approaches: Rocketship, Carpe Diem, KIPP LA, and School of One. We wanted to spur development of schools with a relentless focus on personalization that enables students to proceed at a self-determined rate of mastery, apply relevant real-world experiences, and receive appropriate support regardless of classroom size. We added additional design requirements—sustainability and scalability using public funds—in response to critics' claims that early blended school developers relied heavily on nonrecurring public grants, private philanthropy, and other limited sources of capital to fund ongoing operations and growth.

The majority of grantees funded in 2012 were charter management organizations (CMOs) proposing new schools. These organizations were well positioned with the needed preconditions, flexibilities, and aligned missions. Well-known names like Aspire, Summit, and KIPP responded with next gen versions of their already successful models. NGLC also funded new organizations such as Alpha Public Schools that were launched by experienced leaders and district turnarounds completely reinventing their struggling schools.

With its next wave of grants, awarded in 2013 and 2014, NGLC was determined to increase representation from districts and partner organizations and allowed applications for organizations redesigning existing high-performing schools. Districts such as Lebanon, Pennsylvania and Danville, Kentucky responded. Two partnerships with the School District of Philadelphia emerged with the Workshop School and Building 21. Although the majority of schools funded by NGLC are new charter schools, the network has diversified with 11 districts, seven partnerships, and eight turnaround or redesigned schools.

Since 2012, 39 schools launched their breakthrough models and two

The Christensen Institute defines blended learning as, "A formal education program in which a student learns 1) at least in part through online learning, with some element of student control over time, place, path, and/or pace; 2) at least in part in a supervised brick-and-mortar location away from home; and 3) the modalities along each student's learning path within a course or subject are connected to provide an integrated learning experience."

more will open in fall 2015. Together, they serve as an emerging set of proof points and are a rich discovery ground for adult learning about designing schools and learning environments that address individual student and community needs.

OUR BELIEFS

Each school reflects NGLC's underlying core principles:

- Outcomes matter. New methods matter, but only if they deliver results against current metrics such as state tests in math and English/ language arts (ELA) and against emerging metrics designed to measure deeper learning and college readiness capacities, including the Common Core. And only if they are possible with a sustainable and scalable business model. <u>Preliminary research findings</u> suggest it's possible.
- Education should be learner-centered and learning experiences should be engaging, freed from the confines of classrooms and campuses. Active, situated, and experiential learning improves engagement, problem solving, and achievement.
- Students learn differently and advance at varying rates. The deliberate design of innovative approaches to student progression can accelerate the progress of students who struggle <u>and</u> students who learn with ease.
- Within a context of increasingly high college- and career-ready expectations, technology can enable a personalized learning experience for all students. Technology is a driver behind personalizing instruction and an enabler of effective teaching practices, but it is not an end in itself.
- Technology-enabled breakthrough learning models can loosen the resource constraints of traditional models—time, human capital, budgets, and space. This flexibility allows for differentiated approaches to content, assessment, pacing, and learning styles.
- Rapidly and radically improving college readiness and completion requires the widespread adoption



NGLC schools span the United States, with hubs of innovative schools in the California bay area, southern California, Chicago, and Detroit.

of proven models, practices, and processes. To be truly scalable and portable, *models must be affordable and sustainable*, driven by widely accepted academic and technological standards.

THE NEXT GENERATION OF BLENDED LEARNING

Each model in the NGLC breakthrough schools network reflects these principles in different ways. At Summit Denali, students utilize individual playlists to work through digital content adapted to their skill level and to participate in small-group activities. Students at Da Vinci Communications work in teams with faculty, industry experts, and their peers to create and launch their own interdisciplinary, realworld projects as part of the school's DNA, not as an extracurricular addon. Montessori For All combines the best of the Montessori model with the best of "no excuses" charters in a blended learning environment.

Schools make structural changes to their calendars, schedules, facilities, and staffing configurations to serve students better. West Generation Academy, for example, staggers the start and end dates of contracted teaching terms to increase learning time. Some models tear down classroom walls to create flexible spaces for individual workstations, small-group study, and direct instruction. Other models benefit from new facilities and partnerships: e3 Civic High, housed in San Diego's state of the art downtown library, offers students the benefit of onsite librarian expertise and research support.

Most models have interactive and adaptive learning management systems at their very foundation. Some use specific themes—digital coding at Aspire's CODE Academy, civic leadership at Ingenuity Prep to engage students in collaborative projects, creative thinking, and teambased work.

More models are emerging with strong competency elements, like Great Oaks Charter School of New York City, VLACS-Aspire, and Thrive Public Schools, allowing students to make progress based on mastering the material not seat-time.

Regardless of the approach, NGLC has specified ambitious intended outcomes for these new models:

- At least one and a half years of student performance growth annually on Common Core in ELA and math
- A 90 percent four-year cohort graduation rate for all retained students (using definitions developed by the U.S. Department of Education)
- Financial sustainability
- Accelerated student growth on other college and career success standards such as deeper learning competencies

OUR GOALS

On the pages that follow, we provide a snapshot of these next generation school models. Each profile includes an overview of the tools they are using and the populations they serve alongside a descriptive narrative of their model. The schools are new and we know that plans change and outcomes are uncertain. But we are confident that the larger K–12 community will benefit from their efforts. As the years unfold, we look forward to learning with these innovators and sharing their lessons learned with educators, policymakers, and reform leaders nationwide.

BY THE NUMBERS

- Students Served in First Year (range): 50-1,391
- Eligible for Free and Reduced Price Lunch: 70%
- Student-Instructional Staff Ratio: 12.3*
- Total Cost per Student: \$10,887*
- IT Cost per Student: \$619*
- Facility Size: 145.8 Sq. Ft.*

*These averages are based on Afton Partners' analysis of 41 schools in their first next gen learning year.

THE SCHOOLS

	TYPE N=New T=Turnaround R=Redesign	OPERATOR	GRADES SERVED	TOTAL STUDENTS AT CAPACITY (projected)
Fall 2012 Cohort	N (7) T (2)	District (2) Charter (7) Partner (2)	K-8 (1) Middle (2) 6-12 (2) High (4)	5,200
Alpha Public Schools Blanca Alvarado Middle School	N	Charter	6-8	430
Cornerstone Charter Schools Cornerstone Health + Technology High School	Ν	Charter	9-12	600
Education Achievement Authority of Michigan Nolan Elementary-Middle School	Т	District	K-8	600
Generation Schools Network West Generation Academy	Т	District/Partner	6-12	1,050
KIPP Chicago KIPP Create College Prep Middle School	N	Charter	5-8	350
Leadership Public Schools Oakland R&D Campus	N	Charter	9-13	600
Matchbook Learning Merit Prep Newark	N	Charter	6-12	630
Schools for the Future SFF Detroit	N	Charter/Partner	8-12	480
USC Hybrid High School	N	Charter	9-12	460
Fall 2013 Cohort	N (12) T (1) R (3)	District (6) Charter (10) Partner (2)	K-8 (2) Middle (1) 6-12 (7) High (6)	12,036
Aspire Public Schools CODE Aspire	N	Charter/Partner	К-8	564
Danville Independent Schools Danville High School & Bate Middle School	R	District	6-12	900
Da Vinci Schools Da Vinci Communications	Ν	Charter	9-13	290
e3 Civic High	Ν	Charter	9-12	530
Fayette County Public Schools The STEAM Academy	Ν	District	9-12	600
The Great Oaks Foundation Great Oaks Charter School of New York City	N	Charter	6-12	430
Horry County Public Schools Whittemore Park Middle School	Т	District	6-8	900
Incubator School	N	District	6-12	735
Ingenuity Prep	N	Charter	PK-8	684

THE SCHOOLS (CONTINUED)

	TYPE N=New T=Turnaround R=Redesign	OPERATOR	GRADES SERVED	TOTAL STUDENTS AT CAPACITY (projected)
Fall 2013 Cohort (continued)	N (12) T (1) R (3)	District (6) Charter (10) Partner (2)	K-8 (2) Middle (1) 6-12 (7) High (6)	12,036
Intrinsic Schools	N	Charter	7-12	990
KIPP Bay Area Schools KIPP San Francisco College Preparatory	N	Charter	9-12	500
Lebanon School District Lebanon High School	R	District	9-12	1,400
Summit Public Schools Summit Denali	Ν	Charter	6-12	700
Venture Academy	N	Charter	6-12	275
Virtual Learning Academy Charter School VLACS Aspire	R	Charter	5-12	2,058
The Workshop School	N	District/Partner	9-12	480
Fall 2014 Cohort	N (13) R (1)	District (2) Charter (12) Partner (1)	K-8 (3) Middle(3) 6-12 (3) High (5)	8,816
Alliance College-Ready Public Schools Alice M. Baxter College-Ready High School	Ν	Charter	9-12	600
Blackstone Valley Prep Mayoral Academy BVP High School	N	Charter	9-12	600
Building 21 B21: Philadelphia	N	District/Partner	9-12	600
Caliber Schools Caliber: Beta Academy	Ν	Charter	K-8	810
Design Tech High School	N	Charter	9-12	500
Education for Change Epic Charter School	N	Charter	6-8	504
Foundations College Prep	N	Charter	6-12	840
InnovateEDU, Inc. Brooklyn Laboratory Charter Schools	N	Charter	6-12	1,068
Match Education Match Next	N	Charter	5-8	200
Montessori For All Magnolia Montessori	N	Charter	PK-8	550
Piedmont City School District Piedmont Middle School	R	District	6-8	290
Thrive Public Schools	N	Charter	K-8	750
Valor Collegiate Academies	N	Charter	5-12	1,120
Vertus Charter School	N	Charter	9-12	384
Fall 2015 Cohort	N (1) T (1)	District (1) Charter (1) Partner (2)	6-13 (1) K-8 (1)	1,814
Battelle Education Metro Institute of Technology	N	District/Partner	6-13	800
Matchbook Learning Michigan Technical Academy	Т	Charter/Partner	K-8	1,014

To learn more please visit: http://nextgenlearning.org/funding-framework#319



ALPHA PUBLIC SCHOOLS

BLANCA ALVARADO MIDDLE SCHOOL

PROMOTING A GROWTH MINDSET THROUGH STUDENT OWNERSHIP

We know we have to give students the core content they need. But we're also firm believers that character development is just as important for their long-term success.

JOHN GLOVER, ALPHA PUBLIC SCHOOLS

KEY FEATURES:

- Vew School
- Station Rotation Blended Model
- Social-Emotional Learning
- Next Generation Staffing Model
- 🗹 Extended Learning Time

AT A GLANCE:

Start Date: Fall 2012 Grades Served: 6–8 Location: San Jose, CA Operator: Alpha Public Schools Operator Type: Charter Setting: Urban Students at Start: 170 Students at Capacity: 430

MODEL TOOLBOX:

Learning Management System: Google Sites

Student Information System: Illuminate

Gradebook: Illuminate

Assessment Tools and Approaches: Illuminate DnA, NWEA MAP, Kickboard, Internally created benchmark exams, STAR (Renaissance Learning)

Digital Content Providers: Achieve 3000, ST Math, Khan Academy, Accelerated Reader, IXL, NoRedInk, Newsela

Hardware: Lenovo ThinkPads (students); MacBooks and iPads (teachers) Alpha Public Schools believes that content mastery, while key, is not enough for today's students.

For students to thrive in college and beyond, they must be intellectually curious, have strong character, and understand what it means to behave professionally. At Alpha: Blanca Alvarado Middle School, a blended school in San Jose, California, strong interpersonal relationships and character development are at the model's core.

Alpha's blended approach centers on self-contained classrooms where teachers deliver instruction in all core content areas. One teacher stays with a class of 34 students throughout the day and throughout the year. This approach lets teachers develop strong relationships with students at a time when students need that bond most. Within a single classroom, students rotate between computerbased activities and small group instruction. By integrating technology and delivering a significant portion of the core curriculum online, Alpha students will succeed by moving through content at their individual level of mastery and pace, and receive teacher-led instruction informed by

real-time data from their online content.

During each lesson, a master teacher works with 17 students, engaging them through small group instruction and activities in one section of the room while the rest of the class works through online content at individual computers. Master teachers design classroom time, refine student rotation groups, select content, and guide students to targeted activities and curriculum. Learning coaches—often noncredentialed teachers seeking to gain valuable experience-help provide one-to-one coaching, feedback, and support for students as they work through digital content. Typically, a learning coach will rotate between two classrooms. After spending time in this role, many learning coaches will go on to become Alpha teachers, creating an ongoing pipeline of new talent.

Individual learning plans (ILPs) are created by students and teachers in Goalbook to map each student's learning trajectory. In a single, easy-to-digest snapshot, ILPs show performance data on the student's homework, online activities, and assessments. Using that data, students

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are encouraged, through teacher coaching, to set and revise new goals every six weeks.

Data dashboards also help teachers and learning coaches individualize instruction and identify which students might be ready for accelerated tasks and which might need peer coaching or direct instruction on a specific topic. ILPs also help determine how students spend a daily, 45-minute academic enrichment period; one student might spend this time working through word problems in a circle of peers, while another might access more challenging courses online. Over time, Alpha hopes to empower students to take greater control of their own goal setting and learning trajectories.

Math, Literacy, Foreign Language

Alpha's blended model features a longer school year, a monthly Saturday academy for students who



Individual teachers work with classrooms of 34 students. Learning coaches, non-credentialed instructors often searching for classroom experience, work with two classrooms and provide support to 68 students.

FOR MORE INFORMATION:

School URL: http://www.alphapublicschools.org/our-schools/alpha-middle-school Operator URL: http://www.alphapublicschools.org | Contact: John Glover, john@alphapublicschools.org

BY THE NUMBERS:

Year 1 public revenue per pupil: \$8,828

Year 1 expenses per pupil: \$9,410 Year 4 revenue per pupil: \$8,186 Year 4 expenses per pupil: \$7,748 Years to sustainability: 2

are behind, and an after-school academy for struggling students. It also includes recurring "Data Days" in which teachers engage in professional development by diving deeper into student performance data, analyzing key trends, identifying more targeted interventions, and receiving formative feedback on their performance from peers.

Alpha's overall approach allows for personalized, mastery-based instruction that benefits students, as well as the efficiency and financial sustainability that lets schools thrive and scale in the current funding environment. Alpha serves as a receiving school for students who graduate both from Rocketship, an expanding blended elementary school in the same low-income neighborhood, and from other neighborhood schools. Alpha aims to enable students to continue the progress made at Rocketship and provide a model for blended learning in the secondary grades.

By creating an exceptional new school in a community where most schools fail, Alpha: Blanca Alvarado Middle School intends to serve as a model for replication in other communities with high-poverty, high-minority populations where academic performance levels and graduation rates fall short not only of the state average but also of student potential.



CORNERSTONE CHARTER SCHOOLS CORNERSTONE HEALTH + TECHNOLOGY HIGH SCHOOL

PROVIDING REAL-WORLD HEALTH EXPERIENCE IN A FLEXIBLE, STUDENT-CENTERED MODEL

Our goal is to provide a bridge to the real-world with relevant experiences. We want every student to take ownership over their learning by helping them understand why they are spending so much time in school when the realities of their lives outside of school are so challenging.

Tom Willis, Cornerstone Charter Schools

KEY FEATURES:

- Vew School
- 🗹 Flex Blended Model
- Competency-Based Learning
- Project-Based and Experiential Learning
- **Career Readiness**

AT A GLANCE:

Start Date: Fall 2012 Grades Served: 9-12 Location: Detroit, MI Operator: Cornerstone Charter Schools Operator Type: Charter

Setting: Urban

Students at Start: 75 Students at Capacity: 600

MODEL TOOLBOX:

Learning Management System: Schoology

Student Information System & Gradebook: PowerSchool

Assessment Tools and Approaches: Mastery Connect, MAP

Implementation Partner: Ed Elements

Digital Content Providers: Apex Learning

Hardware: Dell E5420 (240), Dell 9010 Laptops (68) Health care has replaced the auto industry as Michigan's job leader and nationwide, health care jobs are booming. With the opening of Cornerstone Health + Technology High School, Cornerstone Charter Schools hopes to respond to that need while creating a unique high school experience that helps students understand how their studies will translate into real-world occupations.

Their goal is to graduate accomplished and proficient students who continue to college or choose to pursue health related positions immediately after high school. To do so, they aren't just rethinking the traditional school schedule.

They're getting rid of it.

Gone are individual classrooms and instructors for core content areas. Instead, "pods" of 120 students work in a large open space in individual cubicles where they access personalized online content. Glass breakout rooms surround each pod where students receive face to face instruction that provide supplementation, remediation or extension of learning opportunities.

Gone are distinctions for "freshmen" or "sophomores." Instead, student pods are grouped along a continuum from beginner to professional. To advance, students must be able to show mastery through standard assessments – like standardized tests or data harvested from online activities – or through real-world challenges and self-assessments. Virtual data dashboards provide anytime, anywhere access to student progress. Those dashboards are reviewed weekly with advisors (called "relationship managers") to help students reflect on their work.

Some students might move quickly to professional level and begin taking college coursework before graduation. Others might need more time as "intermediates" as they work to meet key competencies.

Gone, too, are the standard schedules across grade levels. As students advance through key competencies, they begin to acquire new privileges that reflect their ability to take control of their own learning. A beginner, for example, may be assigned specific times to work on specific content in their cubicles or with peers in 90-minute blocks.

As a student shows greater capacity for managing their own time and working through content, they are allowed to choose what subjects to study and when and where. An advanced student might work at

"Gone are distinctions for 'freshmen' or 'sophomores." Instead, student pods are grouped along a continuum from beginner to professional. To advance, students must be able to show mastery through standard assessments – like standardized tests or data harvested from online activities – or through real-world challenges and self-assessments."



home, in lounge areas at school, or at an internship outside the boundaries of the campus.

One thing that's not missing is a comprehensive student support model that uses certified teachers and content experts to provide ongoing support and guidance.

Relationship Managers ensure students set and meet their daily, monthly, and yearly goals. Similar to a traditional guidance counselor, relationship managers follow a student from enrollment to graduation, helping students craft their individual learning plans and use student data and feedback to ensure students stay on track toward their goals. Relationship managers are the primary contact for parents and guardians.

Relevance Managers provide direct instruction and support students in the design and evaluation of real world projects and internships.

Rigor Managers oversee online coursework, providing support and setting standards for mastery.

Success Coaches work to help students make the transition to college and career, providing practical advice as students consider life after graduation.

One of the most unique things about the school is its close partnership with the Detroit Medical Center (DMC), Beaumont Hospitals, and others. Throughout their academic experience, students are encouraged to explore health-related careers and competencies through projects, coursework, internships, and other real-world learning experiences.

STUDENT TRANSITION

and progress.

OVERSIGHT & STRUCTURE

FREEDOM & PRIVILEGES

Intermediate

Advanced

Professional

BY THE NUMBERS:

Year 1 public revenue per pupil: \$12,660 Year 1 expenses per pupil: \$15.355 Year 4 revenue per pupil: \$8,241 Year 4 expenses per pupil: \$7.737 Years to sustainability: 3

Cornerstone aims to create a blueprint for real world learning and intends to scale the model with different occupational themes. A new school, slated to open in 2016, will focus on technology and entrepreneurialism.

Beginner Students are those new to the high school or not yet able to self-manage their time. Their individual learning plans will meet them Beginner

As students transition from Beginner and Intermediate levels to Advanced and Professional, they

will increasingly be responsible for self-management, and can take control of their own learning

exactly where they are. These students may need more social maturity to move to intermediate status. The beginner status will change based on performance, not based merely on the amount of time in the school.

An Intermediate Student is familiar with school protocol and has shown basic levels of self management. This student is more socially mature than a beginner but still needs some oversight and structure over their learning environment, schedule, and interactions.

An Advanced Student will be very familiar with school culture and has proven to be an excellent self-manager and role model. The advanced student will be given significant control over their learning locations and interaction processes. This student may not yet be prepared to go independently into external clinical and learning experiences, but will have maximum freedom within the school and will participate in group experiences in external settings.

A Professional Student has gained significant self-management skills and social maturity. This student will have earned the privilege to attend courses on college campuses, in clinical settings, and in self-directed project teams. This student will be a role model/mentor for other students and will be turned to by faculty for advice on improving school operations. Paid internships, college-level courses, and transition experiences in college, careers, and community service will be typical for this student.

FOR MORE INFORMATION:

School URL: http://www.cornerstonecharters.org/health-technology-high-school/

Operator URL: http://www.cornerstonecharters.org/ | Contact: Tom Willis, tom.willis@cornerstonecharters.org



EDUCATION ACHIEVEMENT AUTHORITY NOLAN ELEMENTARY-MIDDLE SCHOOL

CREATING A STUDENT-CENTERED SYSTEM OF EDUCATION TIME THE VARIABLE...LEARNING THE CONSTANT...STUDENTS THE FOCUS

KEY FEATURES:

- **V** Turnaround School
- Competency-Based Learning
- Extended Learning Time
- Next Generation Staffing Model
- 🗹 Flex Blended Model

AT A GLANCE:

Start Date: Fall 2012 Grades Served: K-8 Location: Detroit, MI Operator: Education Achievement Authority of Michigan Operator Type: District Setting: Urban Students at Start: 509

Students at Capacity: 600

MODEL TOOLBOX:

Learning Management System: Buzz teaching and learning platform (powered by Brain Honey, supported by School Improvement Network)

Student Information System: PowerSchool

Gradebook: Buzz and PowerSchool

Assessment Tools and Approaches: Global Scholars Performance Series

Digital Content Providers: Mix of open source, licensed, and teacher created — Compass, BrainPop, and DefinedSTEM via netTrekker; Houghton Mifflin Harcourt, Flocabulary, Imagine Learning, ALEKS Math, ST Math

Hardware: HP Notebooks

Our mission as a catalyst for change is to disrupt traditional public schooling and provide a scalable prototype for 21st century teaching and learning.

EAA MISSION STATEMENT

In 2011, just 20 percent of the students at Nolan Elementary-Middle School in Detroit were proficient in communication arts, only 2 percent were proficient in math, and the majority of students were performing two or more years behind grade level. Like many other persistently low-achieving schools in urban centers, Nolan desperately needed a different system for a better outcome.

Enter the Education Achievement Authority (EAA) of Michigan.

Michigan's governor charged the EAA with transforming the lowest 5 percent of the persistently lowest-achieving schools in the state simultaneously developing while a new approach to educating 21st century students. In 2013, at the end of its first year in turnaround, 71 percent of the students at Nolan achieved one or more years of growth in reading and 61 percent in math. Nolan ranked third out of 124 schools in individual student growth according to data released by Excellent Schools Detroit.

Nolan now bears little resemblance to the traditional middle school it was years prior. Instead of being filled with desks, classrooms contain tables, floor pillows, and work stations. Furniture is modular and allows for flexible grouping. In any one classroom, students might work in small focused groups, spend time on their HP Notebooks, participate in individual conferencing with teachers, and — once introduced to a learning target — cluster to work on projects. Students move throughout the classrooms in a constant buzz of conversation.

But the difference is more than just aesthetic. The design is intended to facilitate EAA's student-centered model, which organizes students by instructional level rather than age and grade level and lets them progress via mastery rather than seat time.

In FAA's student-centered classrooms, students assume responsibility for their learning and participate in planning, goal setting, and producing evidence of what they know and can do based on projects and performance tasks. At Nolan, a climate and culture is being established that fosters student ownership of learning as students become active participants in both thinking and doing in partnership with their teachers. At the center of the design is Brain Honey, a dynamic learning platform that hosts a robust repository of resources, curriculum mapping tools, and assessment tools, as well as a social platform that allows for collaboration and peer-to-peer support.

Learning objects are provided in "bite-sized chunks" and a dashboard provides teachers, parents, and students with prescriptive, real-time analytics. Most importantly, the plat-

"At Nolan Elementary-Middle School, a climate and culture is being established that fosters student ownership of learning as students become active participants in both thinking and doing in partnership with their teachers." form emphasizes not just cognitive skill acquisition but also collaboration and communication — between students and teachers, students and parents, teachers and parents, and students and their peers.

Students spend much of their time working independently and in small groups, conferencing with teachers to monitor progress and for interventions as needed. Rather than pushing students through the system of education, the model gives students a voice every step of the way. Students map their learning paths, make choices and decisions around progression and pacing, conduct self-assessments, and learn to understand the consequences of their decisions.

The daily self-assessments track students' perceptions of their expertise, engagement, and effort. System reports capture students' choice of content, length of use of that content, and preference ratings, which are correlated to student outcomes so that teachers can assess content effectiveness.

At the end of each unit, a final objective assessment serves as a gatekeeper to complement student

BRAINHONEY PREVIEW

Inside Brain Honey, learning objects are provided in "bite-sized chunks" and a dashboard provides students with prescriptive, real-time analytics. Students can choose coursework from a playlist, customize their view, and reach out to collaborate and communicate with peers.





Math, Literacy, Science, Social Studies, Foreign Language (with plans to incorporate Arts, Health and Wellness, and other electives)

evidence of mastery through performance tasks.

Teacher roles also shift under this model. After a rigorous hiring process, teachers undergo personalized, on-demand, and job-embedded professional development in both pedagogy and content to prepare for work in a blended environment. Rather than building one-size-fits-all lesson plans, teachers use reports and real-time feedback generated by the learning platform to plan their interactions with students and provide intervention where needed. Real-time analytics help document best practices and assist teachers in providing

BY THE NUMBERS:

Year 1 public revenue per pupil: \$9,217 Year 1 expenses per pupil: \$6,756 Year 4 revenue per pupil: \$10,417 Year 4 expenses per pupil: \$7,956 Years to sustainability: 0

appropriate support to students as well as in building their own capacity.

Turnaround is notoriously difficult. EAA and Nolan's leadership provide a universal system of support to address the challenges of transforming school culture and overcoming ineffective practices and structures. Wrap-around supports are provided in several key areas — developing a climate and culture that shifts from the system to the student, ensuring highly effective teachers, engaging parents and the community, providing social and human service supports to students and families, and providing anytime, anywhere learning opportunities. EAA's goal is that these activities — coupled with an extended 210-day school year - will help magnify the interdependence of the learning community and the links between a student's individual success and the success of the learning community as a whole.

FOR MORE INFORMATION:

Operator URL: http://www.michigan.gov/eaa | Contact: Mary Esselman, messelman@eaaofmichigan.org



GENERATION SCHOOLS NETWORK WEST GENERATION ACADEMY

TRANSFORMING THE TRADITIONAL SCHOOL MODEL TO HELP DISTRICTS DO MORE WITH CURRENT RESOURCES

66 More than 90 percent of America's children attend public schools managed by districts and governed by teacher contracts. It's critical that our nation pursue transformational innovation in districts as well as outside them.

WENDY PIERSEE, GENERATION SCHOOLS NETWORK

KEY FEATURES:

- 🗹 Turnaround School
- Station Rotation Blended Model
- 🗹 Extended Learning Time
- College & Career
- Readiness

AT A GLANCE:

Start Date: Fall 2012 Grades Served: 6-12 Location: Denver, CO Operator: Generation Schools Network Operator Type: Nonprofit School Type: District Setting: Urban Students at Start: 350 Students at Capacity: 1,050

MODEL TOOLBOX:

Learning Management System: Collaborize Classroom

Student Information System: Infinite Campus, provided by district

Assessment Tools and Approaches: STAR Reading, STAR Math

Digital Content Providers: Khan Academy, Reading Plus, ALEKS , "Accelerated Reader"

Hardware: NComputing-driven classroom mini-labs

West Generation Academy, a new turnaround school launched by Generation Schools Network on the site of Denver's West High, includes many hallmarks of next-generation blended design. School days are longer to expand learning time. Classrooms are designed for rotations; in a single, 90-minute period, students might move from direct instruction to individual work on personalized digital content or to collaborative, small group work. Data tools provide real-time feedback to students and teachers. Digital tools help students "catch up" or dig deeper into their interests.

And yet, Generation Schools is not merely committed to redesigning the academic model in school. It's also committed to creatively "redeploying" a school's existing resources to personalize learning for students, support teachers, transform college and career guidance, and increase learning time—all without adding to school costs and while operating within key parameters of teacher contracts. dents, for example, benefit from a longer school year (200 days versus the standard 180-day calendar year) and from longer school days (8 hours per day). To increase access without adding to the budget, the Academy staggers teacher vacations to keep the amount of "working days" the same and offsets longer teaching days with shorter training days, essentially trading "time for time."

Core class sizes are small; math and humanities classes have 18 to 25 students. Content experts might teach a core course in English or math as their primary role, while also teaching a larger studio class (an elective or additional core course) as a secondary role.

Generation Schools Network also thinks creatively about supporting students outside the classroom. In addition to a school guidance counselor and psychologist, the Academy enlists a team of teachers to provide college and career courses throughout the year. Twice each year for a full month, students participate in a rigorous, credit-bearing course that challenges them to set life goals

West Generation Academy stu-

"Generation Schools is committed to creatively 'redeploying' a school's existing resources to personalize learning for students, support teachers, transform college and career guidance, and increase learning time — all without adding to school costs and while operating within key parameters of teacher contracts."



BY THE NUMBERS: Year 1 public revenue per pupil: \$5,383 Year 1 expenses per pupil: \$6,205 Year 4 revenue per pupil: \$5,190 Year 4 expenses per pupil: \$5,132 Years to sustainability: 2

and explore life beyond the campus through college visits, listening to guest speakers, or participating in technology-based research studies. Each course is designed to encourage students to sharpen their ability to negotiate, communicate, solve problems, and manage projects.

This model has already shown positive results in New York, where Generation Schools Network launched Brooklyn Generation School in 2007 on a campus once described as "unsalvageable." Eighty percent of the school's first graduates were accepted into college, and the number of students graduating on time doubled.

West Generation Academy builds on that model but in a vastly different region. The push west reflects Generation Schools Network's stated goal to scale innovation and systemic transformation across urban schools at varied per-pupil revenue allotments to demonstrate that, with the right partnerships, dramatic change can occur in a district setting. In addition to opening new schools, the organization partners with and supports existing district schools in whole-school redesigns and supports knowledge sharing across affiliate networks to encourage the diffusion of best practices and proven approaches.

The goal, according to school leaders, is to ensure that innovative practice and change occurs not just outside the system, but within it as well.

Conventional School Model Key Advantages Generation School's Signature Model Eight hours per day, 200 days per year Expanded learning time Six hours per day, 180 days per year Smaller class sizes in core 18 - 2525-35 courses Technology-enhanced Half-class mini-labs in every core class Limited access learning Extensive common planning More than two hours each day Typically, 45 minutes per week time High-caliber teacher training More than 20 days per work year One to three days per work year Key data tools to inform Too often limited/delayed Real-time responsive instruction Fewer classes for teachers to Three classes per day Five to six classes per day teach 75 or fewer students daily Far fewer students per 150 or more students teacher

Smaller classes and expanded learning time in the Generation School's model are made possible by creative redistribution of resources that keep costs low.

FOR MORE INFORMATION:

School URL: http://westgenerationacademy.dpsk12.org/ Operator URL: http://www.generationschools.org/ | Contact: Wendy Piersee, wendy@generationschools.org



NEXT GENERATION LEARNING CHALLENGES

MODEL SNAPSHOT

KIPP CHICAGO

EMBEDDING A FLEXIBLE, STUDENT-CENTERED DESIGN IN A HIGH-EXPECTATIONS CHARTER

Our mission is still to make sure kids are ready to go and have the opportunity to go to and through college. We believe technology can help students learn differently and help teachers work more efficiently.

KATE MAZUREK, KIPP CREATE COLLEGE PREP MIDDLE SCHOOL

KEY FEATURES:

- 🗹 New School
- Station and Lab Rotation Blended Models
- **Flexible Learning Spaces**
- **V** Extended Learning Time

AT A GLANCE:

Start Date: Fall 2012 Grades Served: 5–8 Location: Chicago, IL Operator: KIPP Operator Type: Charter Setting: Urban Students at Start: 90 Students at Capacity: 350

MODEL TOOLBOX:

Learning Management System: Eduvant

Student Information System: PowerSchool

Gradebook: PowerSchool

Assessment Tools and Approaches: NWEA MAP

Digital Content Providers: ST Math, i-Ready, Edmodo, Socrative

Hardware: Chromebooks, iPads, iMacs

All KIPP Chicago schools have the same mission: to ensure students are empowered with the character and academic skills necessary to succeed in top-quality high schools and universities, to be happy in the competitive world, and to have a positive impact on their communities. Using extended class days and a mantra that emphasizes commitment to excellence and high expectations, KIPP Chicago is also delivering results: 96 percent of its founding class has graduated from high school and 92 percent has matriculated to college.

KIPP Create College Prep Middle School, opened in fall 2012, builds on the successful KIPP academic model by blending instructional technology with proven, high-quality teaching methods. Students spend nearly half their day engaged in individualized learning at their own pace, on their own device, with curriculum that's tailored to their own level of understanding.

For KIPP Chicago, technology is not a tool for cutting costs — it's a way for a single instructor and a single classroom to serve the individual needs of a diverse student body. Classroom furniture is light and flexible, allowing a lecture-style classroom to be taken apart and reassembled for individual learning on computers or clustered for classroom discussions. In an average day, a student might log into a Google Chromebook to brush up on individual reading skills during homeroom, engage in a hands-on experiment in science class, or work with a teacher-facilitator in a small group to tackle a word problem during math.

A critical component of each day is a "Power Hour" housed within a flexible Learning Lab space. There, students use high-quality videos, tutorials, and interactive content from providers such as ST Math, Typing Pal, and i-Ready to practice key competencies on their own and in teams based on an individual learning plan. Each student's learning plan is developed following summer testing and refined throughout the year through ongoing assessment. The Learning Lab includes individual workstations, as well as areas for one-on-one support with teachers and small group remediation.

"Teachers are still incredibly important in the classroom as the deciding factor about what happens in the class. But what teachers are doing within this space is very differenthow they are using data, how they are creating lessons, how they are providing custom support and remediation."



At each step, student performance data are captured, displayed in user-friendly dashboards, and used by teachers to gauge student progress and pinpoint areas of concern. Similar data dashboards provide feedback to students and parents anytime, anywhere.



different — how they are using data,

BY THE NUMBERS:

Year 1 public revenue per pupil: \$11,609 Year 1 expenses per pupil: \$16,804 Year 4 revenue per pupil: \$8,318 Year 4 expenses per pupil: \$8,725 Years to sustainability: 5

how they are creating lessons, how they are providing custom support and remediation.



KIPP classrooms utilize flexible seating and moveable furniture to enable various configurations and learning zones throughout the day depending on the classroom activity.

During the daily "Power Hour," for example, a single space might accommodate teacherled instruction, group work, and individual computer work.

FOR MORE INFORMATION:

School URL: http://www.kipp.org/school-content/kipp-create-college-prep-middle-school Operator URL: http://www.kippchicago.org/ | Contact: Kate Mazurek, kmazurek@kippchicago.org



LEADERSHIP PUBLIC SCHOOLS

OAKLAND R&D CAMPUS

COMBINING REAL-WORLD R&D WITH STUDENT-CENTERED DESIGN

What is perhaps most unique to the design is that all of this fits around an *R&D* core. We are not simply trying to change the way education is delivered, we are trying to institutionalize design thinking and an innovation culture in one of the most change-resistant segments of our society, public education.

Louise Waters, Leadership Public Schools

KEY FEATURES:

- 🗹 New School
- 🗹 Flex Blended Model
- **Fintrepreneurship**
- 🗹 Experiential Learning
- 🗹 Dual Enrollment

AT A GLANCE:

Start Date: Fall 2012 Grades Served: 9–13 Location: Oakland, CA Operator: Leadership Public Schools Operator Type: Charter Setting: Urban Students at Start: 350 Students at Capacity: Up to 600

MODEL TOOLBOX:

Learning Management System: Created by LPS

Student Information System: Illuminate

Gradebook: Illuminate

Assessment Tools and Approaches: ExitTicket, Illuminate, NWEA MAP

Digital Content Providers: CK-12, K12, Read 180, DynEd, OER

Hardware: Chromebooks

As the spotlight on blended learning has grown in recent years, so, too, has the list of digital content providers and organizations supporting schools and teachers. From digital curriculum to data-rich learning management systems, the landscape can be dizzying.

Leadership Public Schools (LPS), a successful California charter school network, has resisted the urge to turn to long-term contracts with external providers. Instead, it sees itself as planted firmly in the R&D space. With LPS Oakland, a new 9–12 school, LPS is expanding its role as a "collaborative innovator," working with teachers and students to design blended learning environments and tools that will help lay the foundation for key skills, personalize learning, and promote 21st century thinking. LPS aims to involve students in both the production and consumption of technology.

The LPS model focuses on five strategies: 1) Provide personalized learning and empower students to own their data to help them accelerate both the backfill of missing skills and acquisition of new content; 2) Support teachers through powerful use of digital tools and real-time data feedback; 3) Scaffold key concepts so students can access core college prep content; 4) Build opportunities for critical thinking and deeper learning within and outside of class; and 5) Introduce students to college through online college courses with wrap-around support.

These expectations are firm but the structures are evolving. The initial focus of the program has been using technology to maximize student collaboration, student-teacher communication, the infusion of writing across the curriculum, and the development of digital citizenship and independent learning. Undergirding

"At any one time, there are multiple innovations, individual strategies, and products in varying stages of development across the LPS network. A team of teachers designs, adopts, and adapts each idea. It is then prototyped in one or two classrooms with pioneering teachers, iterated by a larger group of teachers through collaborative innovation, and then built into the network-wide practices and expectations."



all of the work is the development of instructional strategies that maximize the use of extensive formative data by both students and teachers. The classroom structures of time and space are evolving as students and teachers learn how best to leverage technology resources.

Although the learning goals are fixed, the actual content and tools can evolve from year to year as teachers test and evaluate open educational content or refine their needs. The emphasis is on providing the very best teaching and learning, not just digital learning. Where there are gaps, LPS develops its own tools and platforms. When something works or doesn't—the informa¬tion flows across the LPS network and beyond.

Social Studies

LPS is committed to developing blended courseware and other resources that are free or low-cost, modularized, and modifiable in order to be easily transferable to schools with constrained facilities, schedules, and staffing. One of the most visible examples of collaborative innovation at LPS is ExitTicket, a sophisticated online "clicker" or real-time student response system that lets students use any kind of technology—including mobile devices—to take online, concept-level quizzes and get imme-



At any one time, there are multiple innovations in varying stages of development across the LPS network. A team of teachers designs, adopts, and adapts each idea. It is then prototyped in one or two classrooms with pioneering teachers, iterated by a larger group of teachers through collaborative innovation, and then built into the network-wide practices and expectations. With varying degrees of formality, ethnographic interviews are conducted during the process to identify issues and promising practices to inform the iterative development.

FOR MORE INFORMATION:

Operator URL: http://www.leadps.org | Contact: Louise Waters, lwaters@leadps.org



BY THE NUMBERS:

Year 1 public revenue per pupil: \$9,079 Year 1 expenses per pupil: \$10,088 Year 4 revenue per pupil: \$9,490 Year 4 expenses per pupil: \$8,907 Years to sustainability: 1

diate feedback. The teacher tracks this just-in-time data on an iPad heatmap and can intervene immediately according to student need. Growth and mastery data are immediately updated for both teachers and students. ExitTicket grew out of a need across LPS schools to track concept mastery and leverage data in more integrated ways and is now available nationally at www.exitticket.org.

Beyond content acquisition, LPS strives to be innovative in how students apply their skills. Currently, students use afterschool time for experiential learning activities. An active student "Geek Squad" provides personal IT support for each staff member and develops video and web-based content for the school. Through a partnership with TechNovations, other students are learning programming and software design. In 2013-14, structures to provide experiences like these to all students will be designed.

A successful partnership with Merritt College is in its third semester of offering online college courses to LPS Oakland students. An on-campus teacher helps students structure their time, de-construct syllabi, navigate online discussions and handle complex readings. To date, LPS students are out-performing their traditional and online Merritt peers.

MATCHBOOK LEARNING MERIT PREP AND MICHIGAN TECHNICAL ACADEMY

TURNING AROUND THE NATION'S LOWEST PERFORMING SCHOOLS

If we could create a few powerful proof points—by enabling schools at the very bottom to perform at the very top with the same kids within four-to-five years—we believe we can reverse the trajectory of underperforming schools across the nation.

SAJAN GEORGE, MATCHBOOK LEARNING

KEY FEATURES:

- **V** Turnaround School
- 🗹 Flex Blended Model
- Competency-Based Learning
- Next Generation Staffing Model

AT A GLANCE:

Merit Prep

- Start Date: Fall 2012 Grades Served: 6-12 Location: Newark, NJ Operator Type: Nonprofit School Type: Charter Setting: Urban Students at Start: 80 Students at Capacity: 630
- Michigan Technical Academy Start Date: Fall 2015 Grades Served: K-8 Location: Detroit, MI Operator Type: Nonprofit School Type: Charter Setting: Urban Students at Start: 1,014 Students at Capacity: 1,014

MODEL TOOLBOX:

Learning Management System & Gradebook: Spark

Student Information System: PowerSchool

Assessment Tools and Approaches: Performance Series (Scantron adaptive assessments), Illuminate, CoreSpring

Digital Content Providers: Compass Learning, ST Math, IXL, iReady

Hardware: Netbooks for students

Matchbook Learning envisions an ecosystem of public education that applies the very best turnaround design to the very worst schools. The goal is to lead schools out of the bottom five percent into the top 20 percent. What works for a school district's lowest-performing schools will eventually work for all schools, creating a transformed education ecosystem in which all students thrive.

What is the very best turnaround design? For Matchbook Learning, it is competency-based blended learning—combining the very best of what teachers can do with the very best that technology can offer. Competency-based blended learning meets students where they actually are rather than teaching to their grade level, helps them achieve one or more years of growth in an academic year, and sets them on the path to reaching their life and career goals.

Matchbook Learning launched its first student-centered blended turnaround model prototype in 2011 with a bottom five percent K-8 school in Detroit Public Schools. After just two years, the school received state recognition as a "Reward School" for schools either in the top five percent or those with similar trajectories. Matchbook Learning launched a second prototype in 2012 with the Education Achievement Authority (EAA) of Michigan. Both of these schools are no longer in the bottom five percent.

After launching a third prototype in 2013 with another EAA school, Matchbook Learning shifted to a fourth prototype, this time with two charter school turnarounds, Merit Prep in Newark, NJ in 2014 and Michigan Technical Academy in Detroit in 2015. The shift to charters ensures that Matchbook can stay with the schools beyond the initial turnaround and along the trajectory from bottom five percent to top 20 percent.

Armed with a learning curve that now spans four prototypes, Matchbook Learning has been able to successfully iterate and improve upon its powerful combination of student-centered learning, teacher capacity-building, and turnaround management.

Matchbook Learning hires a principal and two full-time program managers to implement their design. The two program managers conduct 40 observations and 20 one-on-one coaching sessions per teacher per year. This is critical to scaffolding teachers' capacity for student-centered learning, customizing teacher development so teachers can effectively personalize their instruction. Teachers are recruited, selected, and managed by Matchbook via a management contract.

Learning is leveled according to students' ability as determined by adaptive assessments, not by age or grade level. Within their levels, each student progresses through a learning cycle that includes four stages: Learn & Practice, Peer & Teacher Conference, Apply, and then Assess. The four stages are housed within Spark, Matchbook's learning management system.

Each stage builds in choice and provides for teacher and student interaction.Students begin the "Learn & Practice" activities in Spark selecting from their "Playlist" for a particular learning target. Playlists include research-based third-party content



as well as internal and teacher-created content. In the "Apply" phase, students must demonstrate three pieces of evidence and score at least a three out of four (mastery) in order to take their assessment and move to the next learning target. Students move at their own pace based on mastery, monitored and encouraged by their teacher. This process ensures that student achievement is continually monitored, assessed, and targeted.

In addition to the learning cycle, Matchbook incorporates group project-based learning (PBL) for each core subject every day. PBL ensures that students learn problem solving and 21st century collaborative skills in addition to their individual learning progressions.

Matchbook was founded on the premise that technology-based innovations offer the first and best chance for scalable success to meet the need of the nation's failing schools. The model is both sustainable on public funding and scalable.

By also engaging teacher's unique motivations and abilities in the process of personalized instruction, Matchbook Learning's scalable model ensures that all students have the opportunity to learn and succeed academically.

With a model that appeals to students' and teachers' desire for au-

BY THE NUMBERS:

Merit Prep

Year 1 public revenue per pupil: \$14,520

Year 1 expenses per pupil: \$16,500

Year 4 revenue per pupil: \$14,823

Year 4 expenses per pupil: \$14,823

Years to sustainability: 1

Michigan Technical Academy Year 1 public revenue per pupil: \$9,796

Year 1 expenses per pupil: \$9,558

Year 4 revenue per pupil: \$9,782 Year 4 expenses per pupil: \$9,507

Years to sustainability: 0

tonomy, focuses on mastery of goals and a broader sense of life purpose, and relates specifically to parent and community stakeholders, Matchbook Learning believes it will enact real and sustainable change in the nation's public education.

TURNAROUND FRAMEWORK: 206-STEP PLAN



Through a prescriptive 206step project plan, Matchbook Learning lays out its process for turning around failing schools. Assessments, content, and classroom design are key components of that plan wherein Matchbook Learning works with the community and school on mission alignment and student-centered practices grounded in evidence.

In the competency-based blended learning model, students work through the Learn & Practice, Conference, Apply, and Assess learning cycle and teachers meet daily with students for one-on-one conferences, small group instruction, and goal setting.

Operator URL: http://www.matchbooklearning.com | Contact: Sajan George, sajan@matchbooklearning.com



nextgenlearning.org

SCHOOLS FOR THE FUTURE SFF DETROIT

REACHING DISCONNECTED YOUTH THROUGH A RIGOROUS, RECUPERATIVE COLLEGE PREP MODEL

Schools for the Future is designed specifically for students who are off-track academically, where frustrating school experiences could easily make them walk away. SFF can counter this by addressing learning gaps—but in a way that is recuperative, confidence-building, and blends remediation with challenging, higher-order academic work and extended learning opportunities that help students accelerate their learning and leave SFF college- and career-ready.

EPHRAIM WEISSTEIN, SCHOOLS FOR THE FUTURE

KEY FEATURES:

- Vew School
- Individual Rotation and À La Carte Blended Models
- Competency-Based Learning
- Social-Emotional Development
- Experiential-Based Learning

AT A GLANCE:

Start Date: Fall 2012 Grades Served: 8–12 Location: Detroit, MI Operator: Schools for the Future Development Operator Type: Nonprofit School Type: Charter Setting: Urban Students at Start: 120 Students at Capacity: 480

MODEL TOOLBOX:

Learning Management System & Gradebook: MiStar

Student Information System & Behavior Management: MiStar

Assessment Tools and Approaches: ACT Plan and Explore (Pre, Mid, Post), Academic Approach - 3 Interim Assessment targeting college readiness standards, Performancebased projects

Digital Content Provider: Edgenuity Student Hardware: Chromebooks, HP desktops (Windows 8.1)

Picture a 15-year-old student. Now imagine her in a middle school classroom, struggling with basic skills and a life outside school, managing part-time work and the increasing demands from friends and family. Although she reads at a third-grade level, the term "grade level" just doesn't apply to her—she's a high schooler in every other way—and she's strong at basic math, having helped out in the family business. Promote her socially to high school and statistically she'll drop out by grade 10. Put her in a traditional alternative school or online recovery program and she might graduate, but with marginal skills. But if you keep her in middle school, what will happen to her?

Schools for the Future (SFF) offers an alternative to help her succeed. SFF is a new model for overage and undercredited students that uses a mastery approach to help them recuperate lost credits while accelerating their path toward college-ready standards and high school graduation. In its Detroit-based school, SFF combines intensive staffing with strategies to address social-emotional development with "wraparound" services like tutors and various technologies to support the diverse learning needs of students who are two or more years behind academically when they enter high school.

The heart of a student's SFF experience is the "PACT Team," a group of 12–14 students that meets weekly and is facilitated by a certified school social worker. Along with daily advisory that helps students monitor their academic progress, the PACT provides a "home base" facilitating a personalized program. It anchors every student's SFF experience and provides a regular format for students to develop the necessary habits and skills to graduate college and career ready. For 60 minutes each week, students meet with their PACT team to work on their social-emotional literacy, self-efficacy, group and individual problem-solving skills, and to explore their college and career options and map their pathway.

Students and teachers receive real-time data on performance, and parents can view their children's progress anytime and immediately communicate with SFF advisors. conferences Student-led occur guarterly for a comprehensive review of student progress and support. As a result of these conferences, a student might schedule extra "flex time" practice on a particular skill, or he might work with his advisors to connect with a tutor. "Catch up" davs, or even weeks, are available for students who need them.

SFF students progress through four performance levels to graduation. Courses at the first two levels support acceleration and focus heavily on literacy and math as the "languages of learning." Students spend the bulk of their day working on core subjects. In a prototypical class, five groups of three students work on five different activities within a module, two groups work on a different



BLENDED SUBJECTS: Math, Literacy, Science, Social Studies, PACT (youth dev. class)

module, and three students work individually on their Chromebooks. Students attend SFF from 8:30 a.m. to 4 p.m. participating in a variety of classes and activities that includes Learning Quests in which students work on self-identified projects of interest and recreation & wellness. Learning takes place in different venues-classes, individual work stations, internships, college campuses, and in the community. Through SFF's learning management system, students can stay after regular school hours to plug into their personalized learning "playlist" or do the same at home through their mobile device.

As students advance to SFF's upper levels, Transitions and Pathways, they gain greater independence and broader options about how, where, and when they learn. Their "limitless campus" of school, web, and community-based learning opportunities includes blended courses at the school, online courses, Saturday academies or workshops, tutorials, internships, Summer of Work and Learning activities, community-based projects, and required dual enrollment courses. By the final level, students are offsite as much as 60–70 percent of the day, accessing a range of high-quality learning opportunities such as college courses or internships that a single school could never provide alone. This approach also allows SFF to use an innovative and cost-effective staffing plan, with higher student-staff ratios at lower SFF levels (when students need more intensive support) and fewer staff at higher levels (when students are more independent).

The SFF team integrates wraparound services and a high-tech, high-touch approach into the high school experience. A valuable opportunity exists to apply the new SFF model beyond Detroit to help address the growing nation-wide issue of overage and undercredited high school students.

The school. which originally opened in Fall 2012, closed after the first year due to administrative challenges. The founders reopened the school in Fall 2014.

RECUPERATIVE COLLEGE PREP FOUR LEVEL PERFORMANCE SYSTEM

	ELA	Core 1	Core 2		Transitions	Pathway	s	
STL	Math	Core 1 Core 2			Transitions	Pathwa	ays	
DE	Sci	Core 1	Core 2	Core 2		Pathwa	ys	
NT 1	SS/Hist	Core 1	Core 2	Transitions		Pathwa	ys	
	Othe	Learning Quests, Music, Language, Health, Other Electives						
				ß			C	
STUDENT 2	ELA	Core 1	Core 2	Tr	ansitions	Pathways		
	Math	Core 1	Core 2	Тг	ansitions	Pathway	ys	
	Sci	Core 1 Core 2		Tr	Transitions Pathways			
	SS/Hist	Core 1	Core 2	Tr	ansitions	Pathways		
Other		Learning Q	uests, Art, Langua	ge				

CORE 1: Grade 6 or below proficiency **CORE 2**: Grade 8 proficiency TRANSITIONS: Grade 10 proficiency PATHWAYS: Grade 12 proficiency

CORE 1 & 2 EXPERIENCE

Recuperative college prep curriculum: basic and higher order skills concurrently.

30-day curriculum modules to increase motivation and more effectively track learner profress and needs

Intensive literacy and numeracy development (115+ mins. day)

Built-in opportunities to accelerate through carefully selected acceleration programs

Formal 30-day performance reviews

1:1 technology environment and "high touch/high support" blended online curriculum

PACT Team: Hub of the SFF student experience and daily support system. Facilitated by school psychologist. Affective development curriculum.

Gateway to SFF Upper Levels

Successful presentation of performance portfolio, required reading and math proficiency, and demonstration of gateway and ACT assessment benchmarks.

Transitions & Pathways Experience

Increasing independence and diversity in path to graduation using "limitless campus" of web-based and community learning opportunities

2 required internships

2 required dual enrollment courses

PACT Team continues to provide "home base" for student support and graduation pathway planning

Graduation & Post Secondary Transition

Passed state graduation exam, received ACT score of 21 or better, and met other SFF graduation requirements

FOR MORE INFORMATION: Operator URL: http://www.schools4future.org | Contact: Ephraim Weisstein, eweisstein@schools4future.org



USC HYBRID HIGH SCHOOL

PERSONALIZATION, MINDSETS BY DESIGN, POSITIVE MULTIGENERATIONAL CHANGE

KEY FEATURES:

- Vew School
- Flex Blended Model
- Competency-Based
- Learning
- Project-Based Learning
- College Readiness & Success

AT A GLANCE:

Start Date: Fall 2012 Grades Served: 9-12 Location: Los Angeles, CA Operator: Ednovate Operator Type: Charter Setting: Urban Students at Start: 125 Students at Capacity: 460

MODEL TOOLBOX:

Learning Management System: Google Apps, Hapara, Clever, Illuminate, Canvas

Student Information System & Gradebook: Illuminate

Assessment Tools and Approaches: ACT College and Career Readiness Standards-aligned interim assessment system, Rubrics for performance tasks

Digital Content Providers: Apex Learning, Khan Academy, YouTube, Curriculet, ePrep

Hardware: Chromebooks

We believe that learning is more efficient and effective when it is studentdriven and social. By redesigning how we use our physical space, time, and the role of teachers, students, and technology, we will graduate students who are independent learners and have the discipline, academic skills, and character traits to make a positive multigenerational change within themselves, our community, and in our world.

OLIVER SICAT, USC HYBRID HIGH

When designing a new high school in Los Angeles, the University of Southern California (USC) Rossier School of Education started by zeroing in on the problem: nationwide, just 8% of kids growing up in low-income communities graduate from college by age 24. The neighborhoods surrounding USC are no exception to this pattern with less than 8% of adults having a four-year college degree. Despite the challenge, an increasing body of evidence demonstrates that students from low-income communities can achieve at the highest levels if they are held to high expectations, provided the right supports, and engaged in more personalized learning.

The solution: a college preparatory high school that combines a traditional "no excuses" school culture with a personalized learning academic model that embeds technology across the curriculum and school day. The school's goal is to develop self-motivated and disciplined learners who are prepared to thrive at and graduate from top four-year universities, who will go on to use their college degrees to effect Positive Multigenerational Change (PMC).

To close the college graduation gap for the students USC Hybrid High

serves, the following core beliefs are interwoven throughout the school's design.

Purpose: If students are driven by a deep sense of purpose to use their college degrees and their careers, they will be more likely to persist through college graduation. Students will graduate from high school seeing themselves as agents for Positive Multigenerational Change in their family, community, nation, and world, and students complete annual performance tasks sequenced around those four themes.

Personalization: It is possible to significantly advance the academic proficiency and depth of learning in students through a mastery-based personalized college prep curriculum, therefore increasing the number of students who graduate from college. The school is building upon the impact of the many high-performing charters that are already doing great work by integrating technology to personalize the learning experience, resulting in a more rigorous and engaging program that meets the unique needs of all students. Its blended learning model allows for more efficient use of student

"If students are driven by a deep sense of purpose to use their college degrees and their careers, they will be more likely to persist through college graduation."



and teacher time, creating space for the deep learning that happens with PMC performance tasks.

Mindsets: The school believes in developing the mindsets needed to thrive in and persist through college graduation. The student experience—face-to-face and online—is designed to intentionally develop the traits of integrity, entrepreneurialism, mastery, and joy, aligned with the belief that if students carry these mindsets through their college experience, they will be more likely to persist through college graduation.

USC Hybrid High students' core instruction is delivered through online "modules" that teachers develop in the online learning management system, Canvas. Students work in-

MAXIMIZE STUDENT LEARNING



BY THE NUMBERS:

Year 1 public revenue per pupil: \$10,805

Year 1 expenses per pupil: \$12,062 Year 4 revenue per pupil: \$10,857 Year 4 expenses per pupil: \$10,150 Years to sustainability: 4

Because of the online coursework that is a significant part of the school's instructional model, teachers have access to a constant flow of real-time data with which to evaluate students' progress. Equipped with a wide variety of instructional strategies, teachers can quickly provide interventions (such as one-to-one instruction, small group pullouts, reteaching/remediation using another modality, or peer-to-peer support), in the moment to ensure that instruction is constantly meeting the needs of all students.

Students are also required to complete quarterly performance tasks designed to extend and authenticate their core academic activities. Aligned with the school's mission of Positive Multigenerational Change, projects have oral and written components and correspond with annual themes of "know yourself," "know your community," "know your nation" and "know your world." Through thematic projects, the school aims to give students a deep sense of purpose and inspire them to make a beneficial contribution to their communities.

USC Hybrid High is the flagship campus of the Ednovate network of innovative high schools. Ednovate is opening its second campus in Los Angeles in Fall 2015.

dependently or in strategic grouping

arrangements on self-guided lessons

created and curated by their teach-

ers. Students have control over the

pace at which they work as long as

they are meeting a minimum expect-

ed pace established by the teach-

er. Students who are able to move

quickly through lessons will be able

to do so and then either move on to

the next lesson or complete enrich-

ment activities: students who need

to work more slowly are able to get

the support they need, reviewing

content from earlier in the lesson or

pressing "pause" on a video to prac-

tice another problem. Teachers serve

as facilitators and coaches, providing

support to all students throughout

the lesson or implementing interven-

tions as needed.

School URL: http://www.ednovate.org/about-usc/ | Contact: Oliver Sicat, osicat@ednovate.org



ASPIRE PUBLIC SCHOOLS CODE ASPIRE

CONNECTING STUDENTS TO STEM THROUGH CODING AND TECHNOLOGY

In order for us to prepare all students to get to and through college, we must take a greater responsibility to ensure that they can use technology in increasingly sophisticated ways to access information; communicate and collaborate; problem-solve; innovate; and learn technology concepts, systems, and operation.

LIZ ARNEY, ASPIRE PUBLIC SCHOOLS

KEY FEATURES:

- 🗹 New School
- Station Rotation Blended Model
- STEM and Computer Science

AT A GLANCE:

Start Date: Fall 2013 Grades Served: K-8 Location: Memphis, TN Operator: Aspire Public Schools Operator Type: Charter Setting: Urban Students at Start: 331 Students at Capacity: 564

MODEL TOOLBOX:

Student Information System & Gradebook: PowerSchool

Assessment Tools and Approaches: MAP, i-Ready ELA Diagnostic, Mastery Connect

Digital Content Providers: i-Ready (ELA), eScience 3000, Aha! Science, EasyTech, DreamBox, myON

Hardware: Google Nexus Tablets, Dell 3330 Laptops, Dell ChromeBooks Aspire Public Schools is bringing 13 years of experience operating high-performing public charter schools in California to Memphis, Tennessee. By combining its proven College for Certain model with a focus on computer coding, Aspire Public Schools plans to work in the Achievement School District in Memphis to open 10 schools in five years and to transform Tennessee's bottom 5 percent schools into schools that perform in the top 25 percent. CODE Aspire is Aspire's first K-8 blended learning school in Memphis. Beginning as a K–5 school and scaling up to K-8 by year four, CODE Aspire offers a rich STEM-focused education, individualized technology, rich learning opportunities, and explicit instruction in computer coding skills.

CODE Aspire is committed to teaching all kids strong computer coding skills so that they will be able to better understand the digital world around them, think logically, express themselves creatively, learn to troubleshoot their own problems, and feel empowered. CODE Aspire believes that coding:

- Teaches problem-solving skills
- Provides students with practical application opportunities
- Mirrors learning a foreign language
- Stimulates creativity
- Fosters authentic learning
- Teaches students how technology works
- Promotes collaboration
- Thrives as a discipline
- Can spark student interest in STEM majors and careers

CODE Aspire puts the students at the center of their own learning and focuses on meeting each student's academic needs by creating individualized learning plans for each student. These personalized learning plans (PLPs) provide teachers, parents, and students with a common understanding of the student's learning style, progress and objectives.

The blended school offers classroom rotations in K–5 during which students spend 25% of the instruction time using adaptive learning software. These K–5 classrooms are built almost exclusively on a small-

"Aspire aims for all of its students to be proficient in algebra and all students take two years of Java by the end of grade 8. Teachers engage students in authentic studies of science through online inquiry units, digital simulations, STEM gaming, and virtual labs to move the study of science from the textbook to a hands-on, inquiry-based approach."



group model, during which students can receive differentiated instruction from teachers and via online learning stations.

The instructional model in middle school (grades 6–8) is STEM-focused and moves from a rotation environment to a one-to-one, project-based environment. Students continue to benefit from data-driven customized learning plans that allow them to pursue educational opportunities that transcend grade level. For example, teachers' use of structured data and multiple software programs allow students with different math proficiency levels to receive instruction simultaneously in a single classroom.

Word Work, Math, Science

Because CODE Aspire is a STEM-focused school, science instruction drives scheduling. Aspire aims for all of its students to be proficient in algebra and all students take two years of Java by the end of grade 8. Teachers engage students in authentic studies of science through online inquiry units, digital simulations, STEM gaming, and virtual labs to move the study of science from the textbook to a hands-on, inquiry-based approach.

Students will be fully prepared to succeed in a variety of college prepa-

BY THE NUMBERS:

Year 1 public revenue per pupil: \$8,603 Year 1 expenses per pupil: \$9,482 Year 4 revenue per pupil: \$9,105 Year 4 expenses per pupil: \$8,982 Years to sustainability: 2

ratory high school options, including fully online high schools, blended learning high schools, and online college courses offered in conjunction with high school.

CODE Aspire aims to advance digital age learning through the use of adaptive learning programs, coding instruction, technology-driven and common core-aligned projects, and explicit instruction in information fluency and digital citizenship.

CODING ACROSS THE CURRICULUM

Grade	% of Time Online	Classroom Rotations and PBL	Coding Applications Expectations	Coding Language Expectations
6th	30	Science simulations and virtual labs in a project-based setting. ELA and math classroom rotations using adaptive software, and a Google Docs-rich environment.	Students learn Scratch to create apps that do something	Students learn HTML to build web- sites that use text
7th	30	Science simulations and virtual labs in a project-based setting. ELA and math classroom rotations using adaptive software and a Google Docs- rich environment.	Students learn Java to create apps that do something and take input from someone	Students learn PHP or Python to build websites that use texts and graphics
8th	50	Science simulations and virtual labs in a project-based setting. ELA and/or math classroom rotations, depending on student achievement data and interest. Google Docs-rich environment.	Students learn Java to create apps that do something, take input from someone, and then take a database and persists. This might also include using coding to operate robots.	Students learn PHP or Python to build websites that use text and graphics and manipulate things (like robots)

FOR MORE INFORMATION:

School URL: http://aspirepublicschools.org/schools/regions/tennessee-schools/ Operator URL: http://www.aspirepublicschools.org/ | Contact: Chris Florez, Chris.Florez@aspirepublicschools.org



NEXT GENERATION LEARNING CHALLENGES nextgenlearning.org

DANVILLE INDEPENDENT SCHOOLS BATE MIDDLE SCHOOL AND DANVILLE HIGH SCHOOL

PERSONALIZED LEARNING PATHWAYS BUILT ON A REDESIGNED CORE CURRICULUM

KEY FEATURES:

- 🗹 Complete Redesign
- Lab Rotation and À La **Carte Blended Models**
- \checkmark **Competency-Based** Learning
- Project-Based Learning

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 6-12 Location: Danville, KY **Operator:** Danville Independent **Operator Type:** District School Type: District Setting: Rural Students at Start: 900 Students at Capacity: 900

MODEL TOOLBOX:

Learning Management System: Edmodo, Google Classroom (both in pilot phase)

Student Information System: Infinite Campus

Gradebook: Infinite Campus

Assessment Tools and Approaches: e-portfolios, performance tasks, NWEA MAP, ACT

Implementation Partners: Council of Chief State School Officers Innovation Lab Network, Kentucky Department of Education, University of Kentucky P20 Innovation Lab

Digital Content Providers: ALEKS Math, Compass Learning, Khan Academy, Dreambox, Lexia, Reading Plus

Hardware: PC desktops, PC & Mac laptops, iPads, Chromebooks

🖌 At Danville High School, innovation is about learning experiences that create real challenges and a diploma that promises real possibilities. 99

ANDREW MCKINNEY, SENIOR, DANVILLE HIGH SCHOOL

The Vision: Transforming existing schools presents big challenges. Other innovative schools tend to be one school within a larger system, often a niche program. But Danville Independent Schools is reinventing an entire existing school system that serves all students—in a small community. The community feels an urgency to ensure that all Danville students are equipped with a new range of abilities and knowledge—creativity, critical thinking, team membership, leadership, time management, and more-to seize their place in the Information Age as inventive learners.

Danville's goal is that at least 90 percent of students will graduate high school, enroll in college, and complete college. To accomplish that, all students at the only middle school and high school in the district are beginning to learn in a new way. Establishing new district goals in 2009 put the small, rural district south of Lexington, Kentucky on this path. The planning was boosted in 2013 when the state designated Danville a District of Innovation, providing greater flexibility from traditional school regulation.

The Academic Model: And now, the district is working toward personalized learning pathways that directly link middle school, high school, and

Global

DISTRICT GOALS

Powerful learning experiences

Growth preparedness for all

Excellence in communication

An informed and involved community

college curriculum.

The core curriculum in grades 6-10 has been redesigned so that students can meet state-set college or career-ready achievement benchmarks by the end of grade 10. In other words, course content and sequence has been intentionally aligned with ACT college readiness standards. Students control the pace at which they progress by demonstrating mastery using standards-based assessments, performance tasks, or teacher recommendations. Performance tasks call for high-level class work and strong student presentations to measure 21st century skills not represented in multiple-choice state tests. Students start working toward high school level competency in sixth grade, which means that teachers with middle school certification may lead classes for high school credit and students can gain that high school credit whenever they are ready-flexibilities built into the District of Innovation plan. These measures stretch traditional notions of age and grade progressions to provide greater degrees of ownership and personalization to students.

Once students achieve the state readiness benchmarks, they then customize their own "Area of Focus" for advanced academics, challenging



BLENDED SUBIECTS: MATH, SCIENCE, FOREIGN LANGUAGE

project-based research and analysis or design and action experiences, and internships and other community-based learning experiences. Students may also earn college-level credit for advanced work or gain certification from practical experiences. Individual students collect class work and evidence of mastering key competencies and skills in an e-portfolio. Student research and analysis or design and action projects can be published on a public website to share with a wider audience.

The Organizational Model: With a six year roll-out plan for elements of the model, Danville is consciously managing the change in order to build a new entrepreneurial school system for a general population. The rollout began with project-based learning in 2013-14 through new courses at Bate and Danville High and performance

tasks in all middle school grades. Grades 6-9 will be fully implemented in the third year. This approach enables a fully implemented model that can be fully sustained on public dollars within five or six years, a feature other school designers may want to watch.

The rollout transformation of Bate Middle School and Danville High School leverages attrition and redeployment of existing staff while building teachers' expertise in specific areas: personalized learning pathways and rigorous in-school and out-of-school experiences. In addition to classroom-based teachers, the instructional staff includes three new positions: Pathways Coach (postsecondary liaison, college counselor, and personal learning pathway advisor), Interdisciplinary Learning Designer (a certified teacher who designs project-based and real-world

BY THE NUMBERS: Year 1 public revenue per pupil: \$6.998 Year 1 expenses per pupil: \$6,797 Year 4 revenue per pupil: \$7,009 Year 4 expenses per pupil: \$6,629 Years to sustainability: 0

learning opportunities), and Technology Integration Specialist (tasked not with troubleshooting everyday technology challenges but with building the vision for blended learning and the capacity of teachers to implement expanded blended learning options).

The district is supported in its efforts by the P20 Innovation Lab at the University of Kentucky through teacher training, direct support for implementing initiatives with students, and ongoing feedback and guidance. The district also has the support of wider networks including other Districts of Innovation in the state and the Council of Chief State School Officers' Innovation Lab Network. These two resources may be instrumental in providing supports that the district couldn't access as efficiently on its own.

INTEGRATED AND PERSONALIZED CURRICULUM PATHWAYS



Operator URL: http://www.danvilleschools.net | Contact: : Keith Look, keith.look@danville.kyschools.us



LEARNING CHALLENGES nextgenlearning.org

NEXT GENERATION

DA VINCI SCHOOLS

DA VINCI COMMUNICATIONS

PROVIDING HANDS-ON, REAL WORLD LEARNING OPPORTUNITIES FOR STUDENTS

We want to break the construct of high school as an isolated silo, and open school walls to incorporate college, industry, online and other holistic experiences. By providing hands-on, real world opportunities, students develop critical thinking and problem-solving abilities, and become more engaged, motivated, self-confident and successful in college and beyond.

NICOLE ASSISI, DA VINCI SCHOOLS

KEY FEATURES:

- 🗹 New School
- Flipped Classroom and Lab Rotation Blended Model
- Project-Based <u>Experiential</u> Learning
- Higher Education Partnerships
- 🗹 Flexible Learning Spaces 💡

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 9-13 Location: Hawthorne, CA Operator: Da Vinci Schools Operator Type: Charter Setting: Urban Students at Start: 64 Students at Capacity: 290

MODEL TOOLBOX:

Learning Management System: Weebly websites

Student Information System & Gradebook: PowerSchool

Assessment Tools and Approaches: Project-based assessments, traditional essays and tests by teachers

Digital Content Providers: ALEKS, Rosetta Stone, SCOUT Notes

Hardware: PC Laptops

Da Vinci Schools aims to break down the walls of school, literally. Students will not simply "go" to school to have learning directed at them, but rather, school will exist in, around, and through them, without limitation of setting and time.

Da Vinci Communications launched in fall 2013 to serve racially and socio-economically diverse students in Los Angeles through a highly personalized, student-centered approach by integrating online learning (in a supervised campus lab or at home) and dynamic project-based classroom learning, college courses (online, brick-and-mortar, and blended), internships, and authentic "real world" experience. This is the CMO's fourth school.

At its core, the model is designed around the student. Using a flipped model, students are introduced to new content online and then apply their learning and develop deeper understanding through hands on, inquiry-based exploration in the classroom. Depending on their proficiency level, passion, and needs, each student's individualized learning plan will encompass targeted interventions and supports to ensure their success.

Throughout the day, students rotate between small group instruction, collaborative group work, online learning lab time, advisory, internships, project labs, and meetings with industry experts and lecturers. School space is practical and flexible with versatile furniture to maximize tinkering, small group instruction, and seminars.

Project based learning underpins Da Vinci's model and much thought has been put into designing engaging and enriching activities. Collaborative teams develop interdisciplinary, real-world projects that bring professional practice into the classroom. Projects are planned by teams that may include Da Vinci faculty, industry experts, college faculty and students. Core curriculum and assessment is linked to the California college preparatory requirements and Common Core Standards. Da Vinci works with the Buck Institute for Education to train teachers to be facilitators of project-based learning, in addition

"Project based learning underpins Da Vinci's model. Collaborative teams develop interdisciplinary, real-world projects that bring professional practice into the classroom. Projects will be planned by teams that may include Da Vinci faculty, industry experts, college faculty and students."



BY THE NUMBERS:

Year 1 public revenue per pupil: \$7,050

Year 1 expenses per pupil: \$10,041

Year 4 revenue per pupil: \$7,609

Year 4 expenses per pupil: \$6,417

Years to sustainability: 1

to using its own project creation process developed in house.

Da Vinci Students are trained, taught, and assessed on 21st century skills in addition to content knowledge. Students complete projects in groups and work with industry experts to create meaningful products. In these environments, students receive grades and feedback on their collaboration and communication abilities and performance. Students reflect and present on these skills in addition to defending their learning from the semester's projects in a formal 20 minute "Presentation of Learning."

Da Vinci's blended learning model represents a natural entry point for students to incorporate college courses into their high school program, all within the support and structure of a small high school environment. In partnership with California Community Colleges, Da Vinci is creating opportunities for Da Vinci students to earn college credits while they are still in high school, providing exposure, rigor, and a scaffold toward a pathway to success in higher education. Students benefit from easy access to college classes, extensive counseling and academic support, and a streamlined transfer process.

Da Vinci's new model aims to transform public education by grad-

THE DA VINCI MODEL

Electives



Students spend 30-50 percent of their time learning online, 30-50 percent of their time involved in dynamic project based learning with high quality instructors, and 20 percent of their time in internships, tinkering labs and real world experiences. The addition of early college classes and small group and individual advisories help round out the student experience.

uating college ready students, while also addressing many of the common roadblocks to college completion. Da Vinci Communications students will develop the content mastery, skills, self-confidence and motivation and receive the support they need to succeed in college and after.

FOR MORE INFORMATION:

School URL: http://davincischools.org/dvca.shtm Operator URL: http://davincischools.org | Contact: Nathan Barrymore, NBarrymore@davincischools.org



USING THE URBAN EXPERIENCE AS AN ASSET AND A CONTEXT FOR LEARNING

KEY FEATURES:

- 🗹 New School
- 🗹 À La Carte Blended Model
- Project-Based and Experiential Learning
- Early College and Dual Enrollment
- Higher Education and Community Partnerships
- Civic Orientation

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 9-12 Location: San Diego, CA Operator: e³ Civic High Operator Type: Charter Setting: Urban Students at Start: 270 Students at Capacity: 530

MODEL TOOLBOX:

Learning Management System: Edlio, Inc.

Student Information System: PowerSchool

Gradebook: PowerSchool

Assessment Tools and Approaches: NWEA Map, Mathematics Diagnostic Testing Project (MDTP), Pearson Math XL, Achieve 3000 (Lexile levels)

Digital Content Providers: Achieve 3000, Pearson Math XL, Khan Academy, Civics.com, Big History Project. com, Project Lead the Way, Discovering Chinese, Realidades (web-based Spanish curriculum), Brain Pop, Discovery Education Universal Streaming

Hardware: 1:1 Apple Air Books; Microsoft tablets (Windows 8), 22" i-macs for digital media and design

At e³, students apply their creativity, innovation, and passion to make deep and systemic change within their lives, their local community, and the global environment.

DR. HELEN GRIFFITH, EXECUTIVE DIRECTOR, e³Civic High

The Vision: A 2010 study by the Center for Education Policy and Law found that more than half of the 5,000 public high school students that live in downtown San Diego leave the area to attend high school, indicating a community need for more high-performing school options in the downtown area.

e³ Civic High embraces its urban setting and unique location in the state-of-the-art San Diego Public Library and maximizes its relationship with the downtown community to provide students with powerful learning experiences focused on preparing them for success in college, career, and civic life. In addition, e³ Civic High engages, educates, and empowers students, teachers, and parents creating a community of passionate, lifelong learners who value excellence, community partnerships, social commitment, and individual success. The school embodies civic engagement and civic partnerships in its structure, design, and goals for learning.

The Academic Model: e³ is designed around the four "P's:" people, pedagogy, programs, and places.

People: The academic model is student-centered via self-paced, mastery-based learning. Teachers work with students to create a personalized learning plan. Students have a voice in not only how they manage and create learning, but also in key decisions for the school around instruction, culture, and overall design.

Pedagogy: Students learn through a mixture of self-paced online instruction, teacher or student-led small-group instruction, direct instruction, and problem-based and project-based work. Hands-on project-based learning is a key instructional strategy and is enabled by technology, from the 1:1 laptop or tablet to the selection of digital content. Through the Advisory program, students loop with the same adult throughout their high school experience. As Advisory facilitators, teachers serve as counselors and guides who focus on life skills and successful learning habits.

Programs: With an unwavering focus on preparation for college and career, e³ offers career exploration courses, job shadowing, internships, early college coursework via San Diego City College, and career and technical courses in bio-medical engineering.

Places: The library is not only the home for e³, it is a co-educator. Students are expected to take full advantage of the learning environment and its resources: more than 1.2 million resources in its collection, city librarians as instructors for research, auditorium and special events penthouse, a Teen and Homework Center, art gallery, reading room, City Television, and IDEA lab. In addition,

"The library is not only the home for e³, it is a co-educator."



the downtown community is a home for e³ and co-educator for e³ students. Real-world experiences include internships in downtown businesses and service-learning within the local community.

The Organizational Model: Because e³ was designed with intentional co-location in a 21st century library in a downtown city center, the learning space is a key element of the model. Flexible furnishings and room configurations of the learning spaces support a variety of teaching and learning strategies. They are utilized to encourage students to take ownership of their learning and to learn through active, hands-on, project-based experiences. A research study is tracking how the learning spaces were designed for use.

Media, Bio-Medical Engineering, Physics, Mandarin, Spanish

The model emphasizes cost-efficiency by maximizing human capital, space, and facilities. In-kind contributions from shared use with partners that have a shared mission help to diffuse some of the model's higher costs.

The Operator: The governing board supporting e³ Civic High reflects an extensive community commitment and set of municipal part-

BY THE NUMBERS:Year 1 public revenue per pupil:
\$8,286Year 1 expenses per pupil:
\$10,381Year 4 revenue per pupil:
\$8,515Year 4 expenses per pupil:
\$8,436Years to sustainability: 3

nerships. The school leverages these partnerships to offer a range of services including a pre-paid facilities lease, college-level coursework, college tutors, summer bridge opportunities, community-based internships, professional development for faculty, and research assistance from librarians. e³ intends to serve as a model for co-location with any entity that embraces a shared mission, whether it is a health care facility, museum, corporate headquarters, or college.

THE LEARNING SPACE



All spaces are learning spaces. Furniture is flexible (on wheels) in order to quickly change to accommodate a variety of instructional delivery styles. Most walls are writable (glass, white boards, or white board painted walls) for charting of ideas, problems, challenges, solutions, and mind mapping. All classrooms have glass panels, complete walls, and/or glass doors allowing ease of observation and collaboration. There are four common area learning spaces between a village of five classrooms promoting the sharing of resources, teacher time, small group work, student work exhibitions, and mini-assemblies. There are three large gathering spaces with technology to present and instruct. There are various seating nooks allowing for quiet study and/or small groups. A presentation stairway doubles as travel, learning spaces, presentations, tutoring, and seating for meals.

FOR MORE INFORMATION:

Operator URL: http://www.e3civichigh.com/ | Contact: : Helen Griffith, hgriffith@sandi.net



NEXT GENERATION LEARNING CHALLENGES nextgenlearning.org

FAYETTE COUNTY PUBLIC SCHOOLS THE STEAM ACADEMY

DESIGNING A NEXT GENERATION SCHOOL IN CLOSE PARTERNSHIP WITH A UNIVERSITY

This school will be a place that will stimulate creative thinking and problem solving ... where students will be actively involved in identifying, analyzing, and helping solve problems in their local and global communities."

MARY JOHN O'HAIR, UNIVERSITY OF KENTUCKY

KEY FEATURES:

- 🗹 New School
- Station Rotation and À La Carte Blended Model
- Competency-Based Learning
- 🗹 Dual Enrollment
- Higher Education Partnership

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 9-12 Location: Lexington, KY Operator: Fayette County Public Schools Operator Type: School District Setting: Urban

Students at Start: 150 Students at Capacity: 600

MODEL TOOLBOX:

Learning Management System: iSchool (Moodle-based district system)

Assessment Tools and Approaches: CASEMATE

Digital Content Providers: Khan Academy, Discovery Learning, BAVEL Academy Fayette County Public Schools and the University of Kentucky imagined a 21st-century school that is flexible and adaptable, technology rich, responsive to student and teacher needs, and recognizes and extends learning beyond the traditional school day and classroom.

The STEAM Academy, an urban public school which opened in fall 2013, incorporates mastery learning, personalized instruction, internships, and dual/college credit opportunities. The goal: to ensure that students graduate college and career ready, and experienced. Low-income, first-generation college, and traditionally underserved students have enrollment preference.

The STEAM Academy uses an innovative, hybrid instructional program based in student-paced, mastery- and problem-based experiential learning. Technology helps deliver content and real-time assessment to provide students with greater autonomy, helps instructors better diagnose and address each student's needs, and engages parents more effectively.

Student voice and student agency are central to the school model. Students take ownership of their learning by choosing their instructional delivery, schedule, and learning style and engaging in real-world problem-solving projects that interest them. At the classroom level students work to mastery with time as a variable. Some students may move thorough the coursework in two years and matriculate into classes at the University of Kentucky while others will need four years to be ready for college or career. Demonstration of mastery is determined by summative assessments and evidence collected in an e-portfolio.

Upon entering the school, students are assigned an adviser who remains with the student until graduation. Advisory groups meet bi-weekly throughout the year to provide guidance in college and career readiness skills, personal goal setting and monitoring, and problem identification and solution finding.

The district is taking advantage

"Student voice and student agency are central to the school model. Students take ownership of their learning by choosing their instructional delivery, schedule, and learning style and engaging in real-world problem-solving projects that interest them."



of an environment ripe for innovation. Innovation waivers provide unprecedented flexibility in seat time, enabling a true competency-based approach. The University of Kentucky P20 Innovation Lab (part of CCSSO's Partnership for Next Generation Learning) is helping create the innovative infrastructure and instructional model. In addition, teachers work with Innovation Lab faculty members and other UK faculty who provide training across a range of instructional innovations including project-based learning, performance assessment, and technology integration.

Preparation of these teachers also includes a mentoring component with master teachers, teacher lead**BY THE NUMBERS:**

Year 1 public revenue per pupil: \$17,149 Year 1 expenses per pupil: \$24,853 Year 4 revenue per pupil: \$16,545 Year 4 expenses per pupil: \$12,297 Years to sustainability: 1

ers, and content specialists within Fayette County Schools. Ultimately, the STEAM Academy serves as an incubator—where pre-service and master teachers gain experience in a mastery-based blended learning environment, and a lab where UK faculty can research and pilot new innovations.

A DAY IN THE LIFE

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY		
8:00 a.m.	Daily Kick Off: Initially, this time will be used for daily advisory meetings, but as the year progresses it will also be used for remediation, group project work time, acceleration, time to work on online classes, etc. This student will also be enrolled in music - online course from the University of Kentucky.						
9:00 a.m.	English 101 at	Work time at STEAM with faculty assistance	English 101 at	Dual Credit Calculus 1 (taught	English 101 at University of Kentucky (UK)		
9:30 a.m.	Kentucky (UK)		Kentucky (UK)				
10:00 a.m.	Liston (101 at LIK	as needed		at STEAM)	History 101 at UK		
10:30 a.m.	History 101 at UK	Dual Credit Calculus 1 (taught	History 101 at UK	Dual Credit Calculus 1 (taught at STEAM)			
11:00 a.m.	Dual Credit		Dual Credit		Dual Credit Calculus 1 (taught at STEAM)		
11:30 a.m.	at STEAM)	at STEAM)	at STEAM)				
12:00 p.m.	Lunch and Work	Lunch and	Lunch and Work Time	Lunch and internship	Lunch and Work Time		
12:30 p.m.	Time						
1:00 p.m.			CS 115 Introduction to Computer Programming at UK		CS 115 Introduction to Computer Programming at UK		
1:30 p.m.	to Computer Programming at UK	EBCE (Student		EBCE (Student leaves the Academy for			
2:00 p.m.	EBCE (Student	Academy for	EBCE (Student		EBCE (Student		
2:30 p.m.	leaves the internship Academy for experiences) internship experiences)		leaves the Academy for internship experiences)	internship experiences)	leaves the Academy for internship experiences)		
3:00 p.m.	The "typical" school day will end at 3:00 p.m., however, extended classes could be offered to afford						
After Hours	students more flexibility if needed during the day. Faculty and other support staff will serve as afterhours mentors to assist with tutoring and other needs. The building will remain open to students to allow them to work on other projects, online courses, and to see assistance as needed.						

The basic structure of the student schedule mirrors the majority of undergraduate courses at the University of Kentucky (UK), following a MWF or TR pattern. The schedule will be semester-based; those not ready to move to a new course at the start of a new semester will continue in the same course until they master the standards.

The schedule will include transition time for students coming to and from the UK campus or internship locations.

FOR MORE INFORMATION:

Operator URL: http://www.fcps.net | Contact: Jack Hayes, jack.hayes@fayette.kyschools.us



THE GREAT OAKS FOUNDATION GREAT OAKS CHARTER SCHOOL OF NEW YORK CITY

PERSONALIZED LEARNING THROUGH INTENSIVE TUTORING AND AN ONLINE LEARNING PLATFORM

KEY FEATURES:

- Vew School
- Individual Rotation Blended Model
- Competency-Based Learning
- 🖌 Extended Learning Time
- Flexible Learning Spaces

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 6-12 Location: New York, NY Operator: The Great Oaks Foundation Operator Type: Charter Setting: Urban

Students at Start: 99

Students at Capacity: 430

MODEL TOOLBOX:

Learning Management System: Moodle, Kunskapsskolan Learning Portal

Student Information System: PowerSchool

Gradebook: PowerSchool

Assessment Tools and Approaches: Edusoft, MAP, Achievement Network, and NYSED State Exams

Implementation Partners: Kunskapsskolan

Digital Content Providers: Khan Academy, Apex Learning, Rosetta Stone

Hardware: Google Chrome Books (students and tutors), MacBook Air (teachers and administrators) C Through the example of Great Oaks schools, we are attempting to promote an idea – that personalized learning underpinned by intensive tutoring with a robust online platform and student mastery can be a powerful new paradigm for organizing a school.

MICHAEL DUFFY, PRESIDENT, GREAT OAKS FOUNDATION

The Vision: What would happen if you combined the personalized instruction embodied in the tutor corps model developed by Match Education in Boston with the blended learning program of the Kunskapsskolan schools of Sweden? It is at this intersection of approaches where the Great Oaks Charter School of New York City enters the landscape of breakthrough models. Located in lower Manhattan, its vision is to serve English language learners in particular by providing each student with a learning experience that is completely tailored to her or his needs and learning goals.

The Academic Model: The learning at GO-NYC involves teacher-led lessons, sustained tutoring sessions, and customized online content. An experienced teacher leads students through rigorous and interesting lessons in a group setting. The teacher-led lessons are augmented by at least two hours of personalized tutoring every day for every student. Working with students one-on-one or in small groups, tutors pitch their instruction at the exact level the student needs. Tutors work with the same students every day so they get to know them well.

GO-NYC's model incorporates the mastery-based Kunskapsskolan USA (KUSA) Learning Portal[™] and KU-SA's personalized coaching. Used in 40 schools across Sweden, England, and India, the Learning Portal houses Common Core-aligned curriculum, assignments, and assessments that are curated and regularly updated. The lessons are vibrant and engaging, paced by students' mastery of the subject matter. Students, families, teachers, and tutors all have the same level of access to the Learning Portal, fostering a shared understanding of learning objectives and accountability standards. Teachers and tutors help students identify the combination of tasks that will fa-

KUSA LEARNING PORTAL





cilitate their mastery of tasks, then document their progress and provide supplemental support. Tutors provide weekly coaching sessions as a personalized and shared system of accountability around individual student's learning goals. To learn more about the KUSA program, visit <u>http://</u> www.kunskapsskolan.com/.

The blended learning approach enabled by the Learning Portal together with the tutoring approach allows GO-NYC students to take ownership of their learning. The tutor can assist students when they get stuck with a task in the Learning Portal, and the tutor can prompt students if they get off-topic. In the eyes of the school founders, it is the perfect synthesis of the strengths of the two models.

The founders believe that English language learners in particular will benefit from the personalization provided by the merging of blended learning and intensive tutoring. Because the local community has been calling for more educational options for English language learners, GO-NYC offers a lottery preference for English language learners.

The Organizational Model: The organizational model has been designed to support the student-centered learning model in a sustainable and affordable way. The cadre of full-time tutors—recent college graduates with strong academic backgrounds—is each given a \$7,000 stipend and housing in exchange

for a year of service. It's a popular package: more than 200 individuals applied for the 20 tutor positions available at GO-NYC. In addition, the licensing agreement with KUSA for use of its components, along with professional development and network membership, mirrors the rates that any public school might spend on texts and curriculum development. Through a partnership with New York University, GO-NYC plans to grow its own teacher talent from the tutoring corps—with professional development support through

Language Arts

BY THE NUMBERS:Year 1 public revenue per pupil:
\$18,941Year 1 expenses per pupil:
\$17,521Year 4 revenue per pupil:
\$16,544Year 4 expenses per pupil:
\$15,999Years to sustainability: 2

NYU and KUSA.

The Operator: This is the second school of the Great Oaks Foundation. Its first school in Newark, NJ, utilizes the tutoring model but the founders recognized the limitations of printed worksheet packets that drive the tutoring experience there. Great Oaks envisions a network of schools across the nation, each one providing a personalized education using the model pioneered at GO-NYC, and a network of GO tutors-turned-teachers who bring the ideas of blended learning with them wherever they go.





Students engage in blended learning in three different learning modalities. The Learning Portal personalizes students' learning experience as they use computers in tutoring sessions, during direct instruction, and when they go forth and chart their own journey using the Learning Portal at home.

FOR MORE INFORMATION:

School URL: http://www.greatoakscharter.org/schools/newyork | Operator URL: http://www.greatoakscharter.org/ Contacts: Michael Thomas Duffy, mduffy@greatoakscharter.org



nextgenlearning.org

NEXT GENERATION LEARNING CHALLENGES

HORRY COUNTY PUBLIC SCHOOLS WHITTEMORE PARK MIDDLE SCHOOL

REIMAGINING PUBLIC EDUCATION WITH AN INSIDE-OUT WHOLE SCHOOL TURNAROUND MODEL

KEY FEATURES:

- **Turnaround School**
- Lab Rotation Blended Model
- Competency-Based Learning
- Social-Emotional Learning

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 6-8 Location: Conway, SC Operator: Horry County Schools Operator Type: School District Setting: Urban Students at Start: 200 Students at Capacity: 900

MODEL TOOLBOX:

Learning Management System: Education Elements

Student Information System & Gradebook: Power School

Assessment Tools and Approaches: NWEA MAP (3 times per year), Performance- and competency-based assessment (EPIC)

Implementation Partner: Riley Institute, Education Elements, Quaglia Institute for Student Aspirations, Educational Policy Improvement Center, Coastal Carolina University, and Horry Georgetown Technical College

Digital Content Providers: ALEKS, Achieve 3000, iReady (ELA and Math), Compass Odyssey, IXL Math, Discovery Education Tech Book (Science and Social Studies), MAAP (My Aspirations Action Plan from Quaglia Institute), Learn Bop, EPIC ThinkReady and CampusReady

Hardware: 1:1 iPads, Classroom sets of MacBooks

Children are this country's greatest resource. They are wired to use technology 24/7. It's time for our schools to catch up with what our learners are experiencing and demanding in their learning environments.

JUDY BEARD, WHITTEMORE PARK MIDDLE SCHOOL

The school district of Horry County Schools in South Carolina is turning around Whittemore Park Middle School, a low-performing, highpoverty public school. The highly student-centered iCAN model that will be implemented in the school is designed around a blended core academic curriculum and a carefully constructed system of supports. The competency-based model both accelerates academic gains and develops students' lifelong skills and dispositions in a holistic approach to college and career readiness.

iCAN is an acronym for the model's central elements: individualized, college and career readiness, aspirations of students, and network of support. The model personalizes learning through four support structures: iCAN Learning Teams, iCAN Academy groups, iCAN Exploratory Courses, and iCAN Extended Learning.

In iCAN Learning Teams, groups of one hundred students spend significant time working with digital content, facilitated by four core academic teachers, who provide individual and small group instruction and support. Student groups are flexible and fluid based on weekly assessments of competency and structured around individual student need and learning preferences. Students move among the four Learning Team classrooms based on their personalized learning plans, constructed around each student's aspirations, learning preferences, and demonstrated proficiency. The Common Core State Standards guide selection of content, strategies, learning activities, and assessments in digital, face-to-face, situated, and experiential contexts. Within their teams, students advance based on demonstration of learning through vertically aligned assessments that measure across grade bands.

The iCAN Academy is a comprehensive program focusing on academic and social support, metacognitive development, and lifelong learning skills. Students stay with their small Academy groups— which meet daily for 50 minutes— throughout their middle school years. College and community partners help by providing mentoring and experiential activities.



iCAN Exploratory Courses are enriching learning opportunities designed around students' interests and range from robotics to choral music. Students learn anytime, anywhere through iCAN Extended Learning. Tech tools allow students to interact with digital content, teachers, and peers beyond the traditional school day and outside the school building. Face-to-face tutorials are provided before and after school.

As the model is implemented, Whittemore Park anticipates identifying groups of students using different nomenclature. Rather than identifying a student as "in 6th grade," for example, the school will identify the student as "in year one" since students will be taking courses in a variety of grade levels.

In addition to ongoing professional development to build human capacity, the principal is undertaking a number of steps to ensure that the model is staffed by the most highly-qualified teachers. Existing teachers were interviewed for teaching positions in the iCAN model and new teachers are being recruited in close partnership with the local university's undergraduate and graduate education programs. A variety of constructs provide differentiated support for teachers as well as a system for monitoring and evaluating teacher practice. Through professional development designed and managed by the leadership team, teachers have whole group, small group, and individualized opportunities to learn.

The school's principal, who has extensive experience successfully turning around schools, has been given complete autonomy to innovate and alter all aspects of the existing school. In partnership with the district, the school has begun exploration of alternative course credentialing, preparing to apply for waivers

THE ICAN ORGANIZATIONAL STRUCTURE



The learner is at the heart of the iCAN model, surrounded by four key groups that help the learner and support implementation of the model. The iCAN Leadership Team—principal, teacher leaders, curriculum specialists, guidance counselors, instructional technology specialist, consultant, and district staff—guides the effort.

for the iCAN model for current seat time requirements. As one observer of the school's model commented, "They are really creating a new middle school model rather than shuffling the chairs in a turnaround."

The iCAN model will serve as a promising practices model for the 43 schools within the district and scaled through implementation of promising practices in additional district middle schools as well as in pilot high school sites. Additional partnerships with the Riley Institute's Center for Education Policy and Leadership and Digital Promise's League of Innovative Schools networks also provide opportunities for scale.

BY THE NUMBERS:

Year 1 public revenue per pupil: \$9,623

Year 1 expenses per pupil: \$10,377 Year 4 revenue per pupil: \$9,891 Year 4 expenses per pupil: \$9,891 Years to sustainability: 3

FOR MORE INFORMATION:

School URL: http://wpm.horrycountyschools.net/pages/Whittemore_Park_Middle_School Operator URL: http://wpm.horrycountyschools.net | Contact: |udy Beard, jbeard@horrycountyschools.net


CLOSING THE ACHIEVEMENT GAP AND CULTIVATING 21ST CENTURY CIVIC LEADERSHIP

We believe that amongst the sea of schools serving almost exclusively low-income students of color, we MUST have scalable examples that – with efficiency and effectiveness in their models – promote mastery of rigorous core content and robust 21st century leadership competencies.

AARON CUNY, HEAD OF SCHOOL, INGENUITY PREP

KEY FEATURES:

- 🗹 New School
- Station Rotation and Flex Blended Models
- **V** Civic Orientation
- Next Generation Staffing Model
- 🇹 Community Partnerships

AT A GLANCE:

Start Date: Fall 2013 Grades Served: PS-8 Location: Washington, D.C. Operator: Ingenuity Prep Operator Type: Charter Setting: Urban Students at Start: 108 Students at Capacity: 684

MODEL TOOLBOX:

Student Information System: PowerSchool

Assessment Tools and Approaches: AppleTree Institute's ECR, STEP Literacy Assessment, NWEA MAP, DECA/DESSA Social-Emotional Literacy Assessment

Digital Content Providers: Lexia Core 5, ST Math, Raz-Kids

Hardware: iPads, Chromebooks

The Vision: With a significant commitment to rigorous, accountable, feedback-rich learning, Ingenuity Prep is preparing students to succeed in college and beyond as impactful civic leaders. Ingenuity Prep launched its flagship site to initially serve PreK3 through kindergarten in 2013-14. The school will grow a grade level each year and aspires to eventually expand PK3 through high school.

Ingenuity Prep founders identified two problems with existing school models: 1) few consistently close the achievement gap in high-poverty schools, and 2) few develop robust models for cultivating 21st century leadership competencies. They believe it's imperative that someone provide an example of doing both well and Ingenuity Prep aims to do just that.

In its progressive use of people and technology, it will promote high levels of efficiency, personalization, and accountability in student learning within a sustainable, scalable model. Ingenuity Prep will serve as a forerunner in thoughtfully combining a commitment to rigorous core content and 21st century leadership skills.

The Academic Model: After taking a close look at pioneers and innovators who are successful in solving today's educational challenges, and then mapping those models against the particular needs of Ingenuity Prep's students, the founders grounded the Ingenuity Prep model upon four pillars:

- I: More time on task
- II: Looping teams of content-specialized teachers
- III: A blended model driven by mission-aligned outcomes
- IV: Time explicitly devoted to 21st century civic leadership competencies

More time: Often, addressing the achievement gap simply requires more quality learning time. And so, Ingenuity Prep students, through an extended day and extended year calendar, engage in 33 percent more learning time than their peers in neighboring district schools.

Teacher teams: Ingenuity Prep's career pipeline for teachers features resident, associate, lead, and master teacher positions-each with varying degrees of instructional responsibility and release time. Master teachers have the deepest content knowledge, carry the heaviest burden of planning for and executing the highest-leverage instruction, and, correspondingly, receive one full day of release time per week. Grade-level teams loop with cohorts of students across grade-level bands (PS-PK, K-2, 3-5, 6-8). Teachers cultivate deep content-knowledge across a range of developmental levels, leaving them well-suited for looping. Looping provides for sustained relationships with students and families and minimizes

"A primary goal of Ingenuity Prep's academic model is to provide students with the high level of substantive, accountable, student-to-peer and student-to-teacher discourse called for by the Common Core"



inefficiencies of learning the academic, social, and emotional needs of new students each year.

Blended model: A primary goal of Ingenuity Prep's academic model is to provide students with the high level of substantive, accountable, student-to-peer and student-to-teacher discourse called for by the Common Core. Approximately 70 percent of literacy and math learning time is personalized through the use of digital content and teacher-supported, discourse-rich, small-group instruction with three to eight students. With multiple teachers in each classroom, only about six percent of literacy and math learning time will occur in groups of more than 15 students. Instruction is targeted to maximize the time students spend working within their own "zone of proximal development"-that sweet-spot of learning that best enables growth.

Civic leadership: Not only are leadership competencies integrated into core learning experiences, but Ingenuity Prep commits significant time for explicit cultivation of social-emotional literacy, creative problem-solving skills, and progressive, civic-minded service orientations. Beginning in kindergarten, students engage in over three hours per week in a civic leadership class.

The Organizational Model: Ingenuity Prep supports the academic model through several unique operational strategies. Increased class size funds an additional highly-qualified teacher in each classroom and allows for more small-group work for students. By leveraging partnerships with local teacher residencies and a tiered teacher pipeline, Ingenuity Prep anticipates a high return on its profession-

BY THE NUMBERS: Year 1 public revenue per pupil: \$21,233 Year 1 expenses per pupil: \$21,482 Year 4 revenue per pupil: \$19,299 Year 4 expenses per pupil: \$17,618 Years to sustainability: 2

al development investment in human capital. And Ingenuity Prep has an institutionalized, highly-predictable, and stable salary structure in which the highest levels of effectiveness are consistently rewarded with the highest levels of compensation.

In Washington, DC, per pupil funding rates are high but so are human capital and facilities costs; Ingenuity Prep anticipates that the same model would be less expensive—and therefore also sustainable-in other regions.

The Operator: Ingenuity Prep is a new charter school founded by Washington, DC educators who are driven by the desire for scalable examples of schools serving almost exclusively low-income students of color that promote mastery of rigorous core content and genuine commitment to civic leadership.

BIRD'S EYE VIEW



contexts. FOR MORE INFORMATION: School URL: http://www.ingenuityprep.org/ | Contact: : Aaron Cuny, acuny@ingenuityprep.org



NEXT GENERATION LEARNING CHALLENGES

nextgenlearning.org

INTRINSIC SCHOOLS

CULTIVATING AUTONOMOUS AND PERSEVERING LEARNERS

The mission of Intrinsic Schools is to prepare all students for 21st century postsecondary success and to cultivate independent, intellectually curious learners. To achieve this, we will create a new model that leverages technology to personalize learning and is informed by the experience of great teachers.

MELISSA ZAIKOS, INTRINSIC SCHOOLS

KEY FEATURES:

- 🗹 New School
- 🗹 Flex Blended Model
- 🗹 🛛 Flexible Learning Spaces
- Next Generation Staffing Model

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 7-12 Location: Chicago, IL Operator: Intrinsic Schools Operator Type: Charter Setting: Urban Students at Start: 186 Students at Capacity: 990

MODEL TOOLBOX:

Learning Management System: Google Apps and Sites

Student Information System & Gradebook: Illuminate

Assessment Tools and Approaches: Flubaroo, ExitTicket for quick formative assessments; Illuminate for bigger assessments

Digital Content Providers: Educurious (HS Biology), EngageNY, Think-ThroughMath, ReadingPlus, ST Math, ThinkCerca, NoRedInk, Khan Academy

Hardware: Chromebooks (students and teachers), Macbooks in Digital Lab for Music.

Other: Technology Architecture

Intrinsic Schools, which opened in Fall 2013, is growing to serve 7-12th grade students in Chicago using a blended school model. To reimagine middle and high school, Intrinsic is combining technology-enabled adaptive learning and expert teaching.

Intrinsic cultivates independent, intellectually curious learners who own their learning and much of their schedule. Student goal-setting is a critical element of the model. Each student has a six-year individualized learning plan that outlines a path to post-secondary success. Students are provided with real-time tools to monitor their own progress along this path. Furthermore, students each lead two parent-teacher conferences per year to discuss their progress.

At the start, the 186 students are grouped into two pods of 90 students. At capacity, an Intrinsic school has 11 pods. Students spend half of the day in a humanities block and the other half in a STEM block. Within each block, students move fluidly between individualized adaptive digital content, multimedia content, small group instruction, seminars, and group and independent project work.

Students participate in mixed-ability groups for some activities and at other times receive targeted instruction via on-line content or with peers at the same instructional level.

The Intrinsic model requires a complete redesign of the classroom. The physical space of each pod is open and flexible: there are areas for quiet individual work, small group instruction, collaborative work, group projects, and large forums. When not leading direct instruction, teachers work on interdisciplinary teams and float throughout the space.

While students lead most interactions and are at the center of their own learning, master teachers are at the core of the Intrinsic school

"Student goal-setting is a critical element of the model. Each student has a six-year individualized learning plan that outlines a path to post-secondary success. Students are provided with real-time tools to monitor their own progress along this path. Students also lead two parent-teacher conferences per year to discuss their progress."



design. These teachers design units around essential questions and curate on-line curriculum.

Intrinsic creates internal capacity for teacher development, whereby first-year teachers co-teach with a master teacher. Although these newer teachers are responsible for different content areas, they benefit from sharing responsibility for students with a master teacher.

Intrinsic works closely with various partners to cultivate talented educators and develop integrated curricular experiences for students. For example, the organization works with local social service agencies to support the student holistically, and with local colleges and universities to emphasize college and career readiness from the start.

The charter management organization (CMO) is committed to a research and design approach to teaching and learning. Teachers and students regularly pilot, analyze, and evaluate different aspects of the model. In addition to helping refine the model, this process increases student ownership and motivation.

With both a lean school staffing model and CMO, Intrinsic is sustainable and scalable, planning to serve 4,500 students across five schools over the next five years. Intrinsic's goal is to create a replicable model for preparing students for 21st century college success.



FOR MORE INFORMATION:

Operator URL: http://intrinsicschools.org/ | Contact: Melissa Zaikos, mzaikos@intrinsicschools.org



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KIPP BAY AREA SCHOOLS KIPP SAN FRANCISCO COLLEGE PREPARATORY

A RIGOROUS "NO EXCUSES" ENVIRONMENT WHERE STUDENTS OWN OUTCOMES

We believe that KIPP SF College Prep can create an important model for subsequent high expectations, no-excuses high schools that are serving predominantly low-income students.

CAROLINE GIFFORD, PRINCIPAL, KIPP SAN FRANCISCO COLLEGE PREPARATORY

KEY FEATURES:

- Vew School
- Station Rotation Blended Model
- Next Generation Staffing Model
- College Readiness and Success

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 9-12 Location: San Francisco, CA Operator: KIPP Bay Area Schools Operator Type: Charter Setting: Urban Students at Start: 119 Students at Capacity: 500

MODEL TOOLBOX:

Student Information System & Gradebook: PowerSchool

Assessment Tools and Approaches: Illuminate, CCSSaligned benchmarks, Performance assessments

Digital Content Providers: Achieve3000, Khan Academy, Rosetta Stone, Exit Ticket

Hardware: 1:1 Chromebooks

The Vision: KIPP SF College Prep believes that education is the key that will allow students to realize their fullest potential. Starting with 9th grade in fall of 2013, KIPP SF College Prep will add one grade per year to become 9-12. Through a rigorous academic program and a dynamic, engaging learning environment, KIPP SF College Prep prepares students for success in college and beyond, empowers students to be informed citizens who participate actively in their local and global communities, and enables students to think critically to solve problems, collaborate with peers, and become innovators and creators. The school may serve as a critical proof point at the high school level for financially sustainable, personalized learning for students of color and students from low-income families.

The Academic Model: KIPP SF College Prep is the first KIPP high school in the country to open as a blended model. Throughout each class, student-centered learning is prioritized and much of the learning time is self-paced. The required lesson plan format has moved away from the traditional model of direct instruction and encourages teachers to have students do more of the talking, the thinking, and the mental work during class time. The role of the teacher has shifted from the distributor of knowledge to a coach that guides students through a variety of learning experiences.

Teachers and students also use tech-enabled data and learning tools. The school is utilizing Khan Academy for geometry and algebra classes. Khan Academy's adaptive software platform allows students to move at their own pace as they complete exercises and watch interactive videos. In literature classes, students use Achieve3000 to practice reading and analyzing leveled informational text. The school is piloting a "shifted classroom" (or "flipped classroom") model in biology and using Rosetta Stone to drive instruction in Spanish classes. Students will also participate regularly in Socratic Seminars with a digital component in their literature and pre-AP world history classes.

Teachers and students use Exit Ticket, a daily electronic classroom assessment tool, as well as interim assessments and end-of-course exams built around the Common Core State Standards and aligned to ACT College Readiness Standards. Both teachers and students monitor prog-

"The role of the teacher has shifted from the distributor of knowledge to a coach that guides students through a variety of learning experiences."



ress on these assessments via a data focused dashboard. KIPP SF College Prep will within th practice program where all students are expected to take at least one AP exam. SIPP SF College Prep expects that at nation a

focused on improving digital learning within the school. The community of practice is led by a new staffing role the technology integration specialist—and reflects the ongoing coordination and iterative process among teachers to develop their skills in short cycles that are responsive to student needs. In addition, one full week of professional development is provided to teachers before the start of school and teachers participate in two 90-minute sessions of professional development each month.

Biology

The Operator: KIPP SF College Prep is part of KIPP Bay Area Schools, a network of eight college preparatory, public charter schools that prepare students for success in college BY THE NUMBERS: Year 1 public revenue per pupil: \$7,311 Year 1 expenses per pupil: \$12,128 Year 4 revenue per pupil: \$9,349 Year 4 expenses per pupil: \$9,332 Years to sustainability: 5

and the competitive world beyond. Of KIPP Bay Area Schools' 2,800 students, 97 percent are students of color and 75 percent qualify for the federal free-and-reduced price meals program. Eighty-five percent of KIPP's alumni enroll in college, nearly twice the national average for low-incomes students. KIPP Bay Area Schools belongs to the national KIPP network, which operates 141 schools in 20 states and Washington, D.C., serving over 50,000 students.

DAY IN THE LIFE



least 80 percent of its students will

pass at least one AP Exam so that

they are able to enter college with

earned credits, thus easing the transition to postsecondary education.

Bay Area Schools is paying close at-

tention to the needs of its teachers as

they build their capacity for teaching

in a blended learning environment.

Throughout the school year, teach-

ers are supported in a community

of practice at the school site that is

The Organizational Model: KIPP

- Math (60 minutes) is personalized daily through rotations, small groups, and collaboration
- 70% of Composition class is self-paced
 Students in Foundations class might one
- Students in Foundations class might spend an additional 45-50 personalized minutes each day

SEMINARS AND ADVISORY



- Students set individual goals, action plans, and reflections in Advisory (25 minutes)
- In College Readiness Seminar (60 minutes) students analyze data dashboards and pursue self-paced content
- An online coding class is integrated into the College Readiness Seminar





- Science uses "shifted" learning with teacher-created and curated videos at home
- Class time in science is freed for project work, labwork, and small group collaboration

Throughout the school day, classes offer learning experiences that are student-centered, but classes are personalized and adapted to what each student knows in different ways.

FOR MORE INFORMATION:

School URL: http://www.kippbayarea.org/schools/sfcollegeprep | Operator URL: http://kippbayarea.org Contacts: : Ally Thurman, ally.thurman@kippbayarea.org



NEXT GENERATION LEARNING CHALLENGES

LEBANON HIGH SCHOOL

PERSONALIZED LEARNING IN A MAINSTREAM DISTRICT SCHOOL

We are determined to prove that a transformational model of blended learning can work in traditional public schools.

WILLIAM GIOVINO, PRINCIPAL, LEBANON HIGH SCHOOL

KEY FEATURES:

 Complete Redesign
 Station Rotation Blended Model

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 9-12 Location: Lebanon, PA Operator: Lebanon School District Operator Type: District Setting: Urban Students at Start: 1,209 Students at Capacity: 1,400

MODEL TOOLBOX:

Learning Management System: Schoology

Student Information System: PowerSchool

Gradebook: Illuminate Education, MasteryConnect

Assessment Tools and Approaches: Edusoft, Pathbrite ePortfolios, Exit Ticket

Implementation Partner: Education Elements

Digital Content Providers: Compass Learning, Apex Learning, Achieve 3000, Ten Marks, Khan Academy, Rosetta Stone

Hardware: 1:1 with a mix of PCs, laptops, and tablets

The Vision: Lebanon School District faces the same dilemma that school districts across the country are facing: a difficult budget environment but an urgent need to better serve individual students. Hiring more teachers would provide for more differentiated instruction, but it is just not a solution that works financially. Instead, Lebanon has adopted a new combination of existing tools, new technologies, and innovative teaching methods to help the school's current teachers be more effective at providing learning that is personalized to the individual needs of students. The approach is creating a more cost-effective school in the process. By transforming an existing district high school, Lebanon School District is determined to prove that a transformational model of blended learning is as useful in traditional public schools as it can be in charter schools, new magnet schools, or other schools that have special rules and flexibility through waivers.

The Academic Model: The theory behind Lebanon's school-wide blended learning system—which they refer to as the Hybrid Learning Model— is that it will deliver a more student-centric education that increases student engagement, thereby motivating students to learn, and resulting in improved academic achievement. The school uses a station-rotation approach in the core subject areas where classrooms are arranged with three stations. In the direct instruction station, a certified teacher provides instruction to students in a small group setting. In the collaborative station, students work in groups on projects that reinforce the subject matter and practice 21st century learning skills.

99

In the independent station, students work on digital content that presents the same material in another way. To select digital content and classroom management tools, Lebanon High School evaluated potential tools along a rubric that considers seven factors: general application, assessments, curriculum, reporting, technology, implementation and professional development, and cost. Teachers use data from regular assessments completed at the independent station to cluster students into groups for the rotations.

The model seems to be working. Students in hybrid learning scored nearly three times higher on their Keystone exams than students in traditional classes. In the pilot year, discipline incidents were down 50 percent. Teachers believe their students are more engaged and getting a better education in their hybrid classes. Students say they enjoy the hybrid learning program and are more engaged in their work at school.

"Our students deserve a personalized learning experience and our community requires cost effective administration of instruction. Hybrid learning offers both."

> —Marianne Bartley, Ed.D, Superintendent of Schools, Lebanon School District



BY THE NUMBERS: Year 1 public revenue per pupil: \$13,077 Year 1 expenses per pupil: \$13,449 Year 4 revenue per pupil: \$13,891 Year 4 expenses per pupil: \$13,891 Years to sustainability: 3

The Organizational Model: Because the district intends to demonstrate that blended learning can be transformational in a mainstream school, without additional costs or waivers, Lebanon High School for the most part mirrors the organizational model of a traditional school. The bell schedule has changed to provide more flexibility. Outdated policies around grade and subject-level requirements that posed barriers to teachers have been rewritten. Most importantly, the school and district leaders recognize that teaching staff are being asked to teach in a new way. And so, they have crafted a

BIRD'S EYE VIEW



Science, Social Studies

The Operator: Lebanon High School is the only high school operated by the Lebanon School District, located in a small city in central Pennsylvania. In 2012, Lebanon School District started its journey toward blended learning by collaborating with 14 other schools in Pennsylvania going through the same process. The teachers and administrators in the Pennsylvania Hybrid Learning Initiative meet regularly to share best practices and solve problems. The consortium offers a systematic process and statewide infrastructure to support the implementation of blended learning in schools across Pennsylvania. In 2013, the consortium added 35 schools for a total of 50 blended learning pilots running in mainstream Pennsylvania schools.



The station-rotation model is implemented within 60 minute class periods with 30 students and one teacher. At times, an aide or specialist assists the classroom teacher. With computers at every station, not just the independent online learning station, students are divided into three equal groups, based on assessment data. They spend equal amounts of time at each station.

FOR MORE INFORMATION:

School URL: http://www.lebanon.k12.pa.us | Contact: William Giovino, wgiovino@lebanon.k12.pa.us



SUMMIT PUBLIC SCHOOLS

SUMMIT DENALI

RE-ENVISIONING WHAT SCHOOL LOOKS LIKE

With Summit Denali, we have the opportunity to design an entire school and educational experience around the question, 'How does learning best occur?' By putting student learning at the center and using technology to allow teachers to do what they do best, we will be able to offer a truly optimized learning environment for every individual student.

JOE BIELECKI, SUMMIT DENALI

KEY FEATURES:

🗹 New School

- 🗹 Flex Blended Model
- Project-Based and Experiential Learning
- Competency-Based Learning
- College Readiness & Success

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 6-12 Location: Bay Area, CA Operator: Summit Public Schools Operator Type: Charter Setting: Urban Students at Start: 135 Students at Capacity: 700

MODEL TOOLBOX:

Learning Management System:

Personalized Learning Plan (PLP) Tool, developed by Summit in-house and integrated with Activate Instruction, Illuminate Education, Curriculet, Google Drive

Student Information System: Illuminate Education

Gradebook: Summit's PLP Tool, Illuminate Education

Digital Content Providers: Activate Instruction, Curriculet, Google Drive

When Summit Public Schools examined its portfolio of California schools looking for areas to improve, the end goal was clear—college and career readiness—but school developers struggled to find room for change within their existing model.

The model was already rigorous, with all students participating in a college-prep curriculum, including Advanced Placement courses. The schools were already leveraging digital content in the classroom to help provide differentiated instruction and remediation. But the very design of the traditional school—four walls around a classroom and a teacher driving student learning—was making it impossible to truly think outside the box.

What the school needed was to flip the school model, placing students at the center and allowing them to self-direct and drive their own learning. In the fall of 2013, Summit's Next Generation School Model debuted with the opening of Summit Denali. Summit's Next Generation school model is designed to ensure that every student is prepared for success in college and career by focusing on four elements of college readiness – Content Knowledge, Cognitive Skills, Habits of Success, and Expeditions.

The Summit Denali school day is designed around these four elements.

Personalized Learning Time: Students work towards their individual learning goals to develop and demonstrate content knowledge. Each week, students use the Self-directed Learning Cycle to set goals, make a plan, learn, show what they

know and reflect. Students learn at their own pace, and in the ways they learn best, by utilizing a combination of playlists curated by Summit teachers, peer-to-peer coaching and 1:1 tutoring. Playlists and content assessments are housed in Activate Instruction.

- **Project Time:** Students spend the majority of their school day in Project Time, where they are engaged in authentic, project-based learning experiences facilitated by Summit teachers and housed in a platform called ShowEvidence. Project Time is driven by high-quality, interdisciplinary, deeper learning activities that call on students to think critically, develop important cognitive skills, work collaboratively, and apply the content they are learning in Personalized Learning Time.
- Mentor Time: All Summit students have a mentor who serves as a college counselor, coach, family liaison, and advocate, ensuring stu-





dents excel inside and outside of the classroom every day. Students lead weekly meetings with their mentor, where they review their Personalized Learning Plan, track their academic progress and receive coaching on their self-directed learning skills.

- Summit Reads: Arguably one of the most important skills needed for college and career success, students have dedicated time each day to improve and strengthen their reading. Using an e-reading platform called Gobstopper, students develop their literacy skills and practice perseverance and other important Habits of Success.
- Summit Solves: Mathematical problem-solving skills are also crucial for success in our modern world. Every day, Summit students spend time in Summit Solves, practicing their numeracy skills and mathematical problem-solving at

LEARNING SPACES

their own level and their own pace.
Community Time: Students meet together each week in small, collaborative groups to discuss issues important to them. These Socratic dialogues underpin the Summit community's values of respect, responsibility, courage, compassion, and integrity, while exploring topics such as vulnerability, motivation, and self-advocacy.

Each day, students log into their Personalized Learning Plan (PLP), a student dashboard designed in-house by Summit. In the PLP, students set learning and personal growth goals, track their progress, receive immediate feedback, and are able to access all learning resources at any time.

The PLP is designed to be a dynamic tool where students, families, and teachers alike can offer support and coaching.

Summit Denali also includes a hall-

BY THE NUMBERS:

Year 1 public revenue per pupil: \$9,460 Year 1 expenses per pupil: \$14,464 Year 4 revenue per pupil: \$7,965 Year 4 expenses per pupil: \$7,884 Years to sustainability: 4

mark of Summit's model: an eightweek Expeditions program (held during intervals throughout the school year) that gives students the opportunity to engage in a course, internship, or project that explores areas of interest, passion, and potential careers. During Expeditions, Summit students work full-time on courses ranging from digital arts and theater to robotics and community-service projects. At Denali, Expeditions experiences will integrate with the development of the behaviors and dispositions they need to succeed in college, career, and life.

Summit Denali is one of nine Summit schools in California and Washington State using this Next Generation school model. The charter network plans to grow to serve more communities. In all cases, lessons learned from individual models help refine and influence the entire cohort moving forward.



Summit Denali's learning space is designed to be flexible and fluid, encouraging a natural flow of ideas between teachers and students and meeting all personalized pathways and learning styles. The arrangement of chairs, desks, and even walls shifts multiple times throughout the school day based on the learning experience, whether it is a project, interdisciplinary activity, or personalized learning time. In this way, the learning is never constrained by space.

Operator URL: http://summitps.org/ | Contact: Mira Browne, mbrowne@summitps.org



FOR MORE INFORMATION:

VENTURE ACADEMY

INSPIRING THE NEXT GENERATION OF WORLD-CHANGING ENTREPRENEURIAL LEADERS

We've really put students in charge of their learning. Some faster than others, they've started to set and track their own learning goals, find their passion and voice, and take leadership to help the school.

JON BACAL, VENTURE ACADEMY

"

KEY FEATURES:

- Vew School
- 🗹 Flex Blended Model
- **Fintrepreneurship**
- 🗹 Experiential Learning

AT A GLANCE:

State Date: Fall 2013 Grades Served: 6–12 Location: Minneapolis, MN Operator: Venture Academy Operator Type: Charter Setting: Urban Students at Start: 110 Students at Capacity: 275

MODEL TOOLBOX:

Learning Management System: none

Student Information System: PowerSchool

Gradebook: Kickboard

Assessment Tools and Approaches: i-Ready, STAR (Renaissance Learning), MasteryConnect (teacher-created)

Digital Content Providers: i-Ready, Achieve 3000, Khan Academy, Accelerated Math

Hardware: Refurbished Lenovo laptops; 100 Mbps upload/download fiber cable Venture Academy, a 6-12 charter which opened in Minneapolis in August 2013, isn't just creating 21st century learners. They're helping ignite the passion of the next generation of entrepreneurial leaders: self-propelled students who know how to imagine new opportunities, take initiative and risks, and solve problems. The learning takes place on the edge of the University of Minnesota campus, in a pastel-painted, high-ceilinged former printing plant with lots of windows but no classrooms.

In Venture's model, students one-fourth of whom receive special education services and two-thirds are learning English—are known as trailblazers. The learning model is designed to help trailblazers make rapid learning progress by sparking self-direction and passion. Trailblazers spend most of the school day in their Learning Community. Each community has 55 trailblazers and three learning coaches. Personalized learning pathways are guided by real-time progress data generated by digital content, coach input, and self-reflections. Trailblazers also receive feedback by earning dollars weekly on Venture Paychecks, which track virtue attainment and learning productivity.

The school day includes digital learning, responsive small group coaching in literacy and math, independent study projects, athletics, and experiential learning in art, digital media (making music and movies), tech entrepreneurship (web development and coding), and Makerspace (hands-on tinkering and product development). The latter two courses are coached by Venture's 23-year-old Entrepreneur-in-Residence. Other key activities include a Maker Faire, Life Hack Fair, auctions, a Venture

VENTURE'S PRINCIPLES, CORE VIRTUES, BIG IDEAS



6 CORE VIRTUES

- 1. Courage
- 2. Grit
- 3. Integrity
- 4. Mindfulness
- 5. Community
- 6. Entrepreneurship

3 PRINCIPLES

- Every young person has a unique gift and purpose that can change the world
- 2. Young people should make real-world contributions and assume leadership responsibilities
- 3. Every young person can and should direct their own learning

9 BIG IDEAS

- 1. Learning/leading is a lifelong hero's journey
- 2. Entrepreneurial leadership: All trailblazers can become world-changing leaders
- 3. Entrepreneurial learning: All trailblazers will become selfdirected learners

- The "campification" of school: Venture learning is filled with adventure, joy and friendship
- 5. Trailblazers are makers: They build, create, design, invent, discover, tinker
- 6. Trailblazers are founders: They create new ideas, solutions, organizations
- 7. Trailblazers are scholars: They think critically, write clearly, speak confidently, learn deeply
- Trailblazers are citizens: They take responsibility for improving the world around them
- 9. Character is destiny: Trailblazers act with integrity, grit, courage, mindfulness and purpose



Exchange to buy and sell trailblazer creations, and entrepreneur guest speakers. All Venture stakeholders are focused on achieving two culminating "Big Goals" for Year One: 1) Trailblazers initiate independent study projects that include a Venture Pitch, demonstrating public speaking, persuasive writing, research, SWOT analysis, and teamwork skills; 2) Trailblazers make three years of growth in reading and math. entrepreneurial leadership by encouraging learning from productive failure. In its first month, Venture itself was as much a productive failure as a successful startup. After a month focused—successfully—on building a consistent, orderly, and caring culture for students from some of Minnesota's most struggling schools, its team realized it was not on track to achieve its mission. Venture pivoted, replaced reading and math classes with flexible pullouts and added the tech courses and time for independent projects. A 33-member Trailblazer Leadership team designed an elected government and student jobs to give trailblazers real responsibility for academic tutoring, tech support, cleaning, and other previously adultstaffed areas. As it grows, Venture seeks to remain a lean startup with the agility to try, measure, learn, and iterate in rapid, data-driven cycles.

Venture prepares trailblazers for with flexible pullout THE VENTURE LEARNING COMMUNITIES



The Learning Commons is a large, open area that includes tables where students can access digital curriculum, videos, and learning games as well as work on independent and small group projects and tutorials.

On the perimeter of the Communities, breakout rooms let coaches provide responsive pullouts and tutoring in literacy and math.

The Venture learning space also includes a Makerspace, Wood Shop, Digital Media Lab, Art Studio, Movement Studio, and Conference Room.

FOR MORE INFORMATION: Operator URL: http://ventureacademies.org/ | Contact: Jon Bacal, jbacal@ventureacademies.org



VIRTUAL LEARNING ACADEMY CHARTER SCHOOL

VLACS ASPIRE

SCHOOL IS WHEREVER LEARNING OCCURS

KEY FEATURES:

- 🗹 Complete Redesign
- Enriched Virtual and Experiential Blended Models
- Competency-Based Learning
- Experiential Learning
 Higher Education Partnerships

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 5-12 Location: New Hampshire Operator: Virtual Learning Academy Charter School

Setting: Statewide

Students at Start: 1,391

Students at Capacity: 2,058

MODEL TOOLBOX:

Learning Management System & Gradebook: Moodle

Student Information System: GeniusSIS, customized Salesforce modules

Assessment Tools and Approaches: Traditional & competency assessments in traditional courses; Moodle tools, Show Evidence for performance assessments, Adobe Connect for discussion-based assessments

Implementation Partners: Show Evidence (performance assessment platform), Ascendle & Motivis (Salesforce development), Center for Collaborative Education/Quality Performance Assessment (performance assessment development), Educational Policy Improvement Center (development of student advisory competencies)

Digital Content Providers: VLACS design team (performance assessments), FLVS, eDynamic Learning, SAS Curriculum, Discovery Ed, National Repository of Online Courses, Middlebury Interactive Languages Rapid technological advances have provided us with the tools that are necessary to offer equitable access to high-quality learning experiences, regardless of zip code, and to break free from the constraints of industrial age schedules and calendars.

STEVE KOSSAKOSKI, CHIEF EXECUTIVE OFFICER, VLACS

The Vision: Every student should have an education that helps them soar. That is the foundation for the Virtual Learning Academy Charter School's "Aspire" model. By redesigning its successful virtual school program, VLACS is changing the paradigm of what it means to go to school in the 21st century. Because the policy environment in New Hampshire rewards and encourages competency-based approaches, VLACS Aspire is positioned to provide opportunities for students to move away from "school" being the place for learning to "school" being wherever learning occurs, whether online or in the community.

The Academic Model: VLACS Aspire is developing and implementing a 100 percent self-paced, competency-based learning model. Instead of a course-centric curriculum, the curriculum is framed around a map of required competencies. The goal of the school's redesigned model is to create a nearly limitless number of learning pathways that best meet each student's needs. With the support of an online instructor, students may master each competency through any number of possible learning opportunities: independent learning, projects, internships, work, online courses, face-to-face courses, hobbies, tutoring services, service learning, or a combination of these activities.

As a result, VLACS Aspire is pushing the definition of blended learning: in addition to traditional classroom-based learning, learning experiences in real-world, community-based settings serve as the faceto-face component that is integrated with online learning opportunities. This experiential blended model leverages the power of technology to break down the walls and barriers of what we consider school to be. And students become the ones in charge of selecting how to blend different types of learning to best meet their needs.

Deeper thinking is required of students as they demonstrate their mastery of competencies. All VLACS courses utilize "Discussion-Based Assessment" in which instructors assess competency through discussion-through questioning that requires students to demonstrate that they can apply what they learn. Through "Can Do Assessments," students demonstrate their skills and understanding in response to questions that the teacher designs or that they design themselves, especially for learning through internships and projects. Students have additional opportunities to practice deeper thinking through peer collaboration in distributed learning teams and service-learning.

The Organizational Model: Students can enroll and start learning on any day of the year. In VLACS Aspire's model, teachers are freed from lesson planning and content delivery, enabling them to serve primarily as learning coach, facilitator, and mentor to students. Teachers provide



formative feedback and determine when an intervention—additional online resources or a series of lessons designed by the teacher—is needed to help a student achieve mastery. In this model, teachers become expert at building relationships. Most VLACS students attend local schools and enroll in VLACS part-time. The daily schedule varies by student, in part driven by the place-based school and in part by the student's learning pathway. Some students spend time in a blended learning lab, others work in a library to collaborate virtually with their distributed learning team, while others participate in internships in their local community.

In partnership with higher education institutions—Southern New Hampshire University, an NGLC grant recipient, and the Community College System of New Hampshire—VLACS Aspire offers students the opportunity to earn an Associate's degree or college level certificates through competency-based dual credit courses. SNHU is also an experienced resource as VLACS designs its 100 percent competency-based model and serves as a grade 13/transition year partner.

The VLACS technology infrastructure is cloud-based and designed to scale as the number of students served increases. The organizational BY THE NUMBERS:Year 1 public revenue per pupil:\$4,756Year 1 expenses per pupil:\$4,829Year 4 revenue per pupil:\$4,528Year 4 expenses per pupil:\$4,531Years to sustainability: 1

structure is designed to rapidly increase instructional, support, and/or administrative staff if and when it is needed.

The **Operator:** The Virtual Learning Academy Charter School is a successful statewide online charter school in its sixth year of operation with current course enrollments approaching 20,000. It is projected to have a 70 percent enrollment growth rate over the next five years. The school is not funded based on its student enrollment; instead revenue is earned only when students complete coursework and demonstrate learning.

INTERACTIVE TRANSCRIPT — COMPETENCY MAP



An online interactive transcript keeps track of the learning pathways students take toward mastery of required competencies.

FOR MORE INFORMATION:

Operator URL: http://www.vlacs.org | Contact: : Steve Kossakoski, skossakoski@vlacs.org



nextgenlearning.org

THE WORKSHOP SCHOOL

BUILDING A SCHOOL AROUND A VISION OF LEARNING THAT EMPHASIZES CREATIVITY, COLLABORATION, AND INTERDISCIPLINARY KNOWLEDGE

The world needs problem-solvers, and students need an education that prepares them to confront the world's real challenges. We have shown that when we engage students in a rigorous, real-world project-based learning environment, we dramatically improve their chances for success in college, career, and community.

MATTHEW RIGGAN, CO-FOUNDER, THE WORKSHOP SCHOOL

KEY FEATURES:

- Vew School
- Lab Rotation and À La Carte Blended Model
- Project-Based Learning
- Competency-Based Learning

AT A GLANCE:

Start Date: Fall 2013 Grades Served: 9-12 Location: Philadelphia, PA Operator: The Workshop School Operator Type: Nonprofit School Type: District Setting: Urban Students at Start: 92 Students at Capacity: 480

MODEL TOOLBOX:

Student Information System: PowerSchool, eScholar

Gradebook: District's gradebook

Assessment Tools and Approaches: Project Foundry, digital portfolios, state assessments, NWEA MAP

Digital Content Providers: ALEKS Math, Empower 3000

Project Software: Google drive, CAD/Autodesk, Adobe Creative Cloud

Hardware: 1:1 notebooks

The Vision: The mission of the Workshop School is to unleash the creative and intellectual potential of young people to solve the world's toughest problems. Three core principles underscore the breakthrough design of the school:

- *Put the work first.* Authentic work defines the curriculum and the knowledge and skills students need.
- *Trust students to make decisions.* Decision-making makes them responsible for their work and their ideas, driving ownership of their learning.
- *Make the most out of failure.* The most important part of the learning process is what happens *after* a bad decision is made or a specific approach doesn't work.

The Academic Model: From these core principles emerged a different kind of school. Projects rather than subjects drive the curriculum and the schedule. Teachers focus on helping students figure out the right questions rather than the right answers. Teachers work intensively with students to cultivate the habits of mind to take ownership of their work. They help students figure out what they need to learn in order to complete projects and determine criteria for completing them successfully. Student progress is based on demonstration of mastery and real world impact rather than seat time. And technology is not a subject within the curriculum; it is the means through which work gets done.

The project-based learning model has four stages: 1) make it up (envision), 2) make it real, 3) make it better, and 4) make it happen. All students are expected to take at least two projects through stage four by the time they graduate. Projects are managed using an online system, Project Foundry, which allows students and teachers to align project work with state standards and track credits by subject area.

The day is divided into two large, flexible blocks of time with students working on projects in the morning and learning "building blocks" in the afternoon, either by working independently with online resources or in small seminars. They progress through the school based on demonstrated mastery of applied knowledge and skills and based on project performance. Students are expected to demonstrate mastery and growth in Common Core English language arts and mathematics as well as in collaboration and communication, ownership and commitment, critical thinking and problem solving, and awareness.

The Organizational Model: Staffing, scheduling, budgeting and facilities are all driven by the school's

"Technology is not a subject within the curriculum; it is the means through which work gets done."



instructional model. The school uses a modular organization: it currently has one lower house that will serve grades 9-10 and plans to add two upper houses to serve grades 11-12, each in separate facilities. Lower houses focus on introducing students to the project model and core competencies. Upper houses will be field- or problem-focused.

The initial lower house facility is provided by the school district. Future houses will use existing district facilities or be co-located with university or business partners. Each house is a mix of large group pod space, small team meeting space, individual carrels, and shop space for hands-on work. Students and teachers are organized into advisories (about 15:1) that pair up for project work. Team

THE WORKSHOP MODEL

teaching responsibilities are flexible and can be reconfigured based on expertise and project needs.

The model aims to be sustainable, cost-efficient, and evolutionary, all of which enable its ability to scale.

- Sustainable: The academic model doesn't demand overextended staff in terms of time and students served. Teachers develop relationships with approximately 40 students a year, a stark contrast to a traditional teaching load possibly serving 150 students a year.
- *Cost-efficient:* The financial model focuses the majority of expenses on instructional staff and project tools and supplies, keeping per-student costs down.
- *Evolutionary:* Rather than replicating individual schools, the

BY THE NUMBERS:
(excluding facilities)
Year 1 public revenue per pupil: \$6,205
Year 1 expenses per pupil: \$11,657

Year 4 revenue per pupil: \$6,530

Year 4 expenses per pupil: \$6,526

Years to sustainability: 4

Workshop School will create and expand a network of lower and upper houses as demand requires and resources allow.

The Operator: The Workshop School is a partnership of Project Based Learning, Inc. and the School District of Philadelphia. Since 2011. the operators ran an alternative senior year program for 30 district students called the Sustainability Workshop, which was a two-year pilot of the model. Working within a large urban district in partnership with the teachers' union, the partners created a whole school design from the pilot project that serves the same student population that one would find in a neighborhood high school in Philadelphia.

STAGE 1 Make it up (envision)	STAGE 2 Make it real	STAGE 3 Make it better	STAGE 4 Make it happen
 Define and study the problem Generate possible solutions Assess feasibility 	 Build a prototype Design a solution Set performance criteria 	 Field test/pilot Evaluate and reflect Review/revise performance criteria 	 Redesign and improve Scale up/expand Launch!

Borrowing from principles of design thinking, the project model is constructed so that students can do rigorous work with clear deliverables within each stage. The scope and ambition of the projects and the specific skills required to carry them out successfully become more intensive as students advance through high school. To take a project through stage four, students must clearly define and fully understand a significant problem, develop and field test a solution, assess its impact, and make changes or refinements based on that feedback, and then, ultimately, put it to work in our world.

FOR MORE INFORMATION:

School URL: http://www.workshopschool.org/ | Operator URL: http://www.phila.k12.pa.us/ Contacts: : Matthew Riggan, matthew.riggan@workshopschool.org



NEXT GENERATION LEARNING CHALLENGES nextgenlearning.org

ALLIANCE COLLEGE-READY PUBLIC SCHOOLS ALICE M. BAXTER COLLEGE-READY HIGH SCHOOL

PICKING UP THE PACE: PERSONALIZED ALLIANCE COLLEGE EXPERIENCE

To better prepare our students to persist in college, we need to develop a new school model that offers students significantly more choice, independence, and ownership in their learning.

JUDY BURTON, FOUNDING CEO, ALLIANCE COLLEGE-READY PUBLIC SCHOOLS

KEY FEATURES:

- Vew School
- Flex and À La Carte Blended Model
- Competency-Based Learning
- Early College and Dual Enrollment
- College Readiness and Success

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 9-12 Location: San Pedro, CA Operator: Alliance College-Ready Public Schools Operator Type: Charter Setting: Urban

Students at Start: 100

Students at Capacity: 600

MODEL TOOLBOX:

Learning Management System: Google Applications, EdModo

Student Information System: PowerSchool

Gradebook: PowerSchool, Pinnacle

Digital Content Providers: Pearson Common Core Suite of Courses, Achieve 3000, APEX, Blendspace, MyAccess Writing, Newsela, Revolution K-12, TellMeMore, Young Scholars, UC Scout, Wordly Wise, Class Dojo

Hardware: Macbook Air, iPads

The Vision: Schools in the Alliance College-Ready Public Schools charter network outperform neighboring schools on California's Academic Performance Index. Over 90% of Alliance students graduate high school again exceeding local and state averages—and nearly all graduates are accepted into college.

But Alliance has found that the college completion rate of its alumni is not as strong—the current 28% fiveyear college completion rate is far from its goal of 75% graduating in six years. The charter organization has identified three challenges—insufficient academic rigor in high school, lack of self-direction and time management skills, and financial pressures—that are affecting Alliance graduates' persistence.

To more effectively prepare students to persist in college, Alliance created a new school model that offers students significantly more choice, independence, and ownership in their learning as well as up to a year of college credits, reducing the financial burden of college.

The Academic Model: The Personalized Alliance College Experience (PACE) model, launched at the charter's new Baxter High School, integrates blended learning, early college high school, and competency-based progression with a curriculum comprised of a blended core, college readiness, and college courses.

Blended Core: Within flex blended learning classrooms, students work at their own pace in high school and Advanced Placement courses to build core content knowledge grounded in Common Core and state standards. Students work independently with adaptive digital content or in small groups with their teacher and move to the next unit once they demonstrate mastery.

<u>College Readiness</u>: During Advisory and Forum sessions, students focus on Capstone projects, core coursework, or remediation needs to develop 21st century skills, like creativity, communication, and problem-solving. Students own their time and choose their task, team, and technique for making progress using an online sign-up and calendaring system. Advisory teachers meet with each student every week or two to review goals.

<u>College Courses:</u> Baxter High School students earn up to 30 transferable credits toward an associate's degree. In the self-paced academic model, students may start taking online and/or in-person college courses from local college and university partners as soon as they pass the college's placement test.

Passing a placement test is a significant barrier to college-level learning, so students are given explicit test preparation and first take the placement test in ninth grade. The test acts as a diagnostic so teachers and students know which skill gaps to focus on. Students who do not pass the test are provided with individual coaching, peer and online tutoring, or support from college counselors. The school expects all students will be ready for college course enrollment by eleventh grade.

As they acquire credits, students



make significant progress toward a degree, affordably.

The Organizational Model: The PACE model employs more dynamic roles for educators.

High school teachers provide personalized and higher-order learning opportunities one-on-one or in small groups. Paraprofessional teaching assistants provide classroom management support, help students with digital content, and support students during Forum. Baxter High School is working to develop relationships with local colleges and universities so that college classes are taught by college faculty on the high school campus. College courses can be expensive for a school budget (\$9,000 per course from Los Angeles Harbor College, for example), so Alliance extended its offerings with online college courses from the Young Scholars program (\$3.50 per student per course) and UC Scout (free) to increase sustainable course options. And because the college courses provide both high school and college credit, the addition of college faculty reduces the number of full-time Alliance teachers needed.

The Operator: Founded in 2004, Alliance is the largest charter organization in Los Angeles with 26 middle and high schools serving more than 11,000 low-income students. The organization aims to prove it is possible to educate students at high levels across an entire system of schools. It has a track record and experience of scaling high-quality college prep curriculum and a previous blended learning model to schools in its network, and intends to do the same with the PACE model as it demonstrates effectiveness.

PACE STUDENT EXPERIENCE

College Readiness Experience	s Blended Core School Classes	High College C (online or	oursework in person)			
9 TH & 10 Th	GRADES	11 [™] & 12 [™] GRADES				
A Day	B Day	A Day	B Day			
Advisory	Advisory	Advisory	Advisory			
ELA	Math	Psychology	Student Course Choice (e.g. history)			
Forum	Forum	Student Course Choice (e.g. science)	English 101			
Spanish	Physical Education	Political Science	Student Course Choice (e.g. math)			
Science	History	Forum	Forum			

Students move from blended core high school classes to college readiness experiences to college coursework. During Advisory every morning, students set goals for the upcoming day, week, month, or semester. The daily calendar involves 90-minute blocks on an alternating day schedule that mirrors a college course schedule. Students can move from high school to college coursework whenever they pass the college placement test.

FOR MORE INFORMATION:

School URL: http://www.baxterhigh.org/

Operator URL: http://www.laalliance.org/ | Contact: Judy Burton, rjburton@laalliance.org





BLACKSTONE VALLEY PREP MAYORAL ACADEMY BVP HIGH SCHOOL

PERSONALIZATION THROUGH TECHNOLOGY THAT FREES TEACHERS TO FOCUS ON DEEPER LEARNING

Differentiation has never been easy, but this model can prove that personalization is possible for all scholars, regardless of background or current academic level. Given the diversity of BVP's scholar population, the blended BVP High School has the opportunity to serve as a proof point for any school, anywhere.

JONATHAN SANTOS SILVA, HEAD OF SCHOOL, BVP HIGH SCHOOL

KEY FEATURES:

- 🗹 New School
- Station Rotation, Flipped Classroom, Flex Blended Model
- Community Partnerships
- College Readiness & Success
- Project-Based and Experiential Learning

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 9-12 Location: Cumberland, RI Operator: Blackstone Valley Prep Mayoral Academy

Operator Type: Charter

Setting: Suburban and Urban

Students at Start: 80

Students at Capacity: 600

MODEL TOOLBOX:

Learning Management System: Aspen, Google Apps for Education

Student Information System: Aspen

Gradebook: Aspen

Assessment Tools and Approaches: Standards-based Grading, Capstone Projects

Digital Content Providers: Study Island, Aventa Learning, eDynamic, Newsela, Khan Academy, IXL, Sophia.org

Hardware: Chromebooks

The Vision: The mission of Blackstone Valley Prep Mayoral Academy is to prepare scholars for entry and success in the colleges and careers of their choice. BVP High's founders believe that blended learning offers scholars from all backgrounds and learning styles the ability to reach this end goal at a personalized pace. Serving an intentionally diverse population from two urban and two suburban Rhode Island communities, the charter organization launched BVP High as a proof-point of two interdependent principles:

- Deep personalization through blended learning can meet any scholar's needs, regardless of race, class, or current ability
- This success can therefore be implemented by any school, public or private, anywhere

The Academic Model: BVP's blended learning model helps scholars function in a complex world where global and personal connectedness is just as important as being able to navigate technology. The model is tailored by grade level: expanded learning opportunities for all students in all grades; blended rotations and a flex environment in ninth grade; more fluid schedules and experiential learning opportunities in the upper grades. It makes possible what is perhaps the most challenging and critical need in education: differentiation.

<u>A student-centered school:</u> A personalized learning plan identifies each scholar's academic and career goals. Personalized learning objectives guide teachers' instruction, online content, and the selection of internships, elective courses, and expanded learning opportunities.

"Learning labs" help bridge gaps and enrich scholar learning. In ninth grade, the lab extends math and English/language arts by 45 minutes every other day, pushing scholars beyond grade-level standards to engage in deeper learning. In 11th and 12th grade, learning lab opportunities include college-level courses.

Deeper learning in a community: The bulk of in-person class time involves meaningful group discussions and higher-order thinking tasks using structures such as Socratic seminars, peer collaboration, and giving peer feedback to fellow scholars. Teachers facilitate small group instruction, supervise project-based learning, and provide rich feedback to scholars.

But learning is not restricted to the classroom. Scholars have 24/7 access to online content through a 1:1 device program and a comprehensive learning management system. Scholars engage in expanded learning opportunities (ELOs) to earn elective credits. Personalized, standards-aligned and competency-based, ELOs provide social connection where scholars engage with local colleges, com-

"BVP's blended learning model helps scholars function in a complex world where global and personal connectedness is just as important as being able to navigate technology."



BLENDED SUBJECTS All

munity organizations, museums, and employers and learn how to excel in the workplace.

Assessment within a community: Every high school student in the state of Rhode Island is required to complete at least two performance assessments. At BVP High, this involves a 10th grade capstone project, either a research project or an internship with a writing and presentation component. Additionally, all scholars are required to create a portfolio in order to graduate.

The Organizational Model: BVP aims to be incredibly effective with similar student-teacher ratios and resource allocations as traditional-model schools.

Brown University has been involved in the high school model's design, implementation, and analysis of outcomes since BVP's founders began planning it. The goal of the partnership effort is to create a framework for scalability and sustainability that can be utilized in the state and nationally.

To provide intense support for teachers and develop individual strengths, professional development is differentiated through mentoring and coaching. With professional learning communities and data dives, teachers analyze classroom practice and assessment results with their colleagues. Teachers also drive the research, design, and implemen-

BY THE NUMBERS:

Year 1 public revenue per pupil: \$13,484

Year 1 expenses per pupil: \$18,468 Year 4 revenue per pupil: \$14,420 Year 4 expenses per pupil: \$13,906 Years to sustainability: 4

tation of technology—a dynamic process responsive to the ever-changing needs of both scholars and teachers.

The Operator: BVP leaders often note that they are making a large impact in a small state. As a network of public charter schools in Rhode Island started in 2009, BVP serves grades K-8 in two elementary schools and a middle school along with BVP High. It will grow to seven schools by 2018 serving more than 2,000 scholars in K-12, nearly 20% of the sending districts' enrollment.

THREE-STATION TIME-TECHNOLOGY SWAP



Using a three-station rotation and a math and ELA learning lab, BVP High increases personalization with the same teacherstudent classroom ratio as a traditional class. And the faculty-scholar ratio during small group instruction can be as low as 1:5, 1:3, even 1:1.

Scholars rotate between three stations:

1. Self-paced digital learning: writing, editing, digital content, research

2. Small group instruction, with or without laptops: lecture, writing workshop, discussion, debate, Socratic seminar, etc.

3. Cooperative small-group practice: project-based learning, tutoring/peer teaching, simple lab experiments, etc.

Scholars also engage in group and individual work in the math and ELA learning lab.

FOR MORE INFORMATION:

School URL: http://www.blackstonevalleyprep.org/our-schools/high-school Operator URL: http://www.blackstonevalleyprep.org/ | Contact: Jeremy Chiappetta, jchiappetta@blackstonevalleyprep org



BUILDING 21 B21 PHILADELPHIA

NETWORK-BASED LEARNING

Our vision for the future of education is one where young and adult learners are connected through a learning network built upon rigorous learning, deep personal relationships, and powerful lived experiences and facilitated by technology.

TOM GAFFEY, CHIEF INSTRUCTIONAL TECHNOLOGIST, BUILDING 21

KEY FEATURES:

- Vew School
- Flex and À la Carte Blended Model
- Competency-Based Learning
- Project-Based and Experiential Learning
- 🗹 Community Partnerships 🗕

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 9-12 Location: Philadelphia, PA Operator: B21 Operator Type: Nonprofit School Type: District Setting: Urban Students at Start: 150 Students at Capacity: 600

MODEL TOOLBOX:

Learning Management System: Edmodo, Slate, Google Apps for Education, Drupal

Student Information System: Pearson/StudentNET, Slate

Gradebook: Slate Competency Dashboards

Assessment Tools and Approaches: Performance Tasks, MAP, iLit, Academy of Math, Khan Academy

Digital Content Providers: Khan Academy, Academy of Math, iLit

Hardware: Chromebooks (students), Surface Pro 3 (staff) The Vision: If you can picture school as a network with an individual learner at the center who is connected to learning through integrated courses, technology, deep personal relationships, and powerful lived experiences, then you can picture Building 21 (B21). As a non-selective neighborhood high school in the School District of Philadelphia, B21's mission is to empower networks of learners to connect with their passions and build agency to impact their world. It's accomplished by providing the support and structure for students to develop the skills and mindsets to design their own learning.

The Academic Model: The mastery-based academic model of B21 provides learning through project-based, passion-based, and online instructional approaches. Students engage directly with real-world learning opportunities both in and out of school.

Students design their own pathway to graduation by demonstrating competencies that cross academic, mindset, and social-emotional learning. A personal advisor helps ensure that students are on track to graduate and to achieve their goals.

Building 21 is organized into studios, workshops, and advisories. Core studios are project-based and enable students to pursue interdisciplinary lines of inquiry in areas such as science and social studies. Choice studios are passion and interest-based and enable students to explore areas of interest while completing real-world projects and connecting learning to life. These authentic opportunities deeply engage students in integrated content, focusing on their individual areas of interest and need.

Blended learning modules and focused skill development are incorporated into workshops. Aligned with Common Core standards, the workshops are targeted at acceleration in math and literacy. While students are grouped heterogeneously in core studios and by interest in choice studios, they are organized by skill level in workshops.

Assessment at B21 is varied and frequent. Diagnostic assessments determine students' current level of competency and a performance assessment exhibition concludes a studio. Student work is assessed using the learning continua and teachers and students receive assessment data through blended learning modules.

To create connections, build a sense of identity, and support personalized pathways, students are grouped into an advisory. Each advisor works with a group of 17 students who will be with that advisor until they graduate. The relationships built in advisories are the foundation of the model.

The Organizational Model: Everyone at B21 is a learner, including staff. Teachers and outside experts from industry and higher

"Everyone at B21 is a learner, including staff."



education work together on studio learning experiences with students, enabling a highly fluid integration of content and reorganized roles, time, and tasks for educators. Teacher development focuses on mastery of competencies, collaboration, and continuous learning through inquiry and action that parallels B21 student learning experiences.



At the top level of the model is B21's competency framework, which provides a dashboard for students and advisors to serve as a design constraint for learning pathway design and to track progress toward graduation. A toolkit for the framework was developed in partnership with the Office of New School Models at the School District of Philadelphia.

DECOUPLING LEARNING FROM SCHOOL



opportunities. These opportunities are grounded in a <u>competency-based progression system</u> that enables teachers and students to design a wide array of learning opportunities and to produce evidence of mastery.

BY THE NUMBERS:

Year 1 public revenue per pupil: \$10.353

Year 1 expenses per pupil: \$14,653 Year 4 revenue per pupil: \$7,297 Year 4 expenses per pupil: \$7,914 Years to sustainability: 4

The Operator: B21, a School Development Partner with the School District of Philadelphia, opened its first school in fall 2014. The Office of New Schools at the district provides leadership and oversight for B21 and other innovative new schools. The district has agreed to work with the B21 team to infuse the lessons learned from its first school into systemic high school reform efforts around personalized learning, blended learning, and proficiency-based pathways. B21 is opening its second school in Allentown in Fall 2015 following the same growth model.

The network approach of B21 lends itself to nimble, flexible growth where instead of creating additional schools, B21 may add learning nodes to its network in partnership with local communities and families in Philadelphia and nationally. The nodes can plug into the competency framework, online content and modules, and community partnerships while providing space for anchor learning communities, core studios, and individual and group workspaces for students and staff. The goal is to reach 10,000 students in five to seven years.

FOR MORE INFORMATION:

School URL: http://ferguson.b-21.org/ Operator URL: http://www.b-21.org/ | Contact: Laura Shubilla, laura@b-21.org



CALIBER SCHOOLS CALIBER: BETA ACADEMY

COMBINING A NO EXCUSES CHARTER WITH BLENDED AND PROJECT-BASED LEARNING

Nothing in our model is fixed. We are going to start with these key principles and enhance and refine as evidence dictates. We will be data driven, and use data to adapt our curriculum and team as needed to keep to our ambitious targets.

RON BELLER AND JENNIFER MOSES, CO-FOUNDERS, CALIBER SCHOOLS

KEY FEATURES:

- Vew School
- Rotation and Flex Blended Models
- Competency-Based Learning
- Project-Based and Experiential Learning
- Next Generation Staffing Model
- Social-Emotional Development

AT A GLANCE:

Start Date: Fall 2014 Grades Served: K-8 Location: Richmond, CA Operator: Caliber Schools Operator Type: Charter Setting: Urban Students at Start: 297 Students at Capacity: 810

MODEL TOOLBOX:

Student Information System: Illuminate

Gradebook: Engrade

Assessment Tools and Approaches: Linkit, iReady, MAP

Digital Content Providers: iReady, ThinkCerca, Blend Space, Scratch, Hapara, Zearn, ST Math, Newsela

Hardware: Chromebooks

The Vision: Think back to a typical first day of school. Did someone from the school visit you at home, meeting with you and your family to learn about your interests, history, strengths, and needs? Probably not. But that's what happens at Caliber: Beta Academy, and along with an intake assessment, it is the first step in shaping the personalized learning plan that guides each student's educational journey at the K-8 school.

Caliber: Beta Academy is reimagining education as we know it, with the belief that the innovations in its model will allow 100% of its students to graduate ready to attend and succeed in a competitive four-year college and beyond. Many youth in Richmond, California experience a very different outcome—in fact, 93% of the school's inaugural class were performing at least one year behind grade level. This unfortunate reality is why Caliber is committed to creating a school model that will best serve the youth in this vibrant but struggling community.

The Academic Model: Delivering "Education Reimagined" means holistic changes—not small tweaks. Caliber's academic model is designed based on the founding team's experience in running schools, as well as nearly a year of research, school visits, and brainstorming. Through this process, they created a school that includes:

- *Personalized Learning Plans* so students, parents, and teachers understand each student's individual needs and goals
- Blended learning for English and math to ensure students are always learning or practicing based on their current level and need
- **Project-based learning for science and social studies** to teach true comprehension over rote memorization
- Explicit and integrated social and emotional curriculum through restorative justice circles, positive behavior reinforcement, family style lunches, and more
- **Daily writing blocks** for full mastery of this critical skill
- Daily computer coding/engineering/robotics courses for AP-level ability of this in-demand skill.

Above all, the school's leaders believe in constant improvement. The founders built the initial model based on experience, research, and an eight-week summer session pilot. But Caliber: Beta is a lab school and will continue to refine its model as the school team learns what works for different students in different situations.

The Organizational Model: A co-teaching model benefits both teachers and students. Each grade has a teacher team, with each teacher accountable for the full set of students. This allows joint curriculum

"I used to hate going to school...but now I wake my parents up so I can get to school earlier." —6TH GRADE STUDENT



development, peer learning among teachers, and exposure to multiple teaching styles for students. In addition, teachers receive weekly observation, feedback, and group professional development.

The school leader and two assistant principals focus primarily on instructional development and community-building while an operations coordinator manages administrative needs. This level of adult collaboration and professional learning is necessary for the intensely data-driven learning envi-



BLENDED SUBJECTS: Literacy, Math

ronment, ensuring the school's constant drive for improvement.

The Operator: Caliber is committed to creating a school model that is sustainable on public funding at full enrollment. The network's first school, Caliber: Beta Academy opened with 297 students and it doubles its enrollment in the second year. Caliber plans to open six schools over six years in the Bay Area, serving about 5,000 students in two K-12 pipelines.

To prepare the organization for growth, the founders have concen-

BY THE NUMBERS:

Year 1 public revenue per pupil: \$9,828

Year 1 expenses per pupil: \$13,403 Year 4 revenue per pupil: \$10,290 Year 4 expenses per pupil: \$10,206 Years to sustainability: 4

trated on systems development and designing a leadership pipeline right from the start. As they observe student outcomes at Caliber: Beta to strengthen and improve student learning at the school, they are monitoring what works in their model to ensure that they open and continue to operate high-quality schools during every stage of growth.

EDUCATION REIMAGINED



Caliber's slogan of "Education Reimagined" has three core pillars: 1. Reimagining the curriculum, 2.Reimagining how children learn, 3.Reimagining the role of teachers. In a personalized journey to college readiness, students develop individual learning goals with their teacher-mentors and regularly check in on their progress. They take ownership of their learning journey to reach the destination: ready to get to—and through—college. On that journey, students master core subjects like English, math, science, and social studies as well as critical skills such as computer coding, self-regulation, and mindfulness.

FOR MORE INFORMATION:

School URL: http://www.caliberbetaacademy.org Operator URL: http://www.caliberschools.org/ | Contact: Ron Beller, ron@caliberschools.org



DESIGN TECH HIGH SCHOOL d.tech

DIVERSE STUDENTS INNOVATION-READY

We believe that all students have superpowers, the ability to make a unique contribution to the world. And it's our job as educators to help students uncover that ability.

KEN MONTGOMERY, EXECUTIVE DIRECTOR AND FOUNDER, D.TECH

KEY FEATURES:

- Vew School
- 🗹 Flex Blended Model
- Competency-Based Learning
- Project-Based and Experiential Learning
- Higher Education Partnership

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 9-12 Location: Millbrae, CA Operator: Design Tech High School Operator Type: Charter Setting: Urban Students at Start: 142 Students at Capacity: 500

MODEL TOOLBOX:

Student Information System: School Pathways

Gradebook: School Pathways

Assessment Tools and Approaches: Performance tasks, Moodle, Math XL, Google Classroom

Digital Content Providers: BYU Hardware: Chromebooks The Vision: In today's world, we can choose what information to consume, when, where, and in what form. The founders of Design Tech High School (d.tech) created a school with this kind of extreme personalization where students convert ubiguitous information into knowledge and put their knowledge into action. The goal of d.tech is innovation-ready students who graduate from college in four-years. Following expert Teresa Amabile's understanding of innovation as the intersection of expertise, creative thinking skills, and motivation, d.tech develops innovation-ready students by combining content knowledge with the design thinking process while fostering a sense of autonomy and purpose.

The Academic Model:

Self-Pacing and High Standards: Throughout high school, students gain increasing ownership over what, how, and when to study. Students complete performance tasks to synthesize and apply multiple concepts to demonstrate deeper learning and mastery as they move through a standards-based curriculum.

d.tech uses a flex schedule, fueled by assessment data. Teachers create new schedules each week, selecting among group work, individual tutoring, direct instruction, and participation in performance tasks. When a teacher does not assign tasks, students self-direct their work in the learning hub accessing course content and a playlist of concepts and questions to address. Help is available when needed. Since every d.tech student has a personalized learning experience, the school model and the flex schedule help teachers provide accommodations effectively for English learners and students with disabilities who take part in mainstream curriculum according to their IEP.

"

Design Thinking: Design thinking extends project-based learning which often leaves out the most important aspect of problem-solving: identifying a problem worth solving.

d.tech's founders have distilled the design thinking process into three steps: explore, create, learn. Students are taught how to explore the world around them and empathize with others, a necessity in creating a human-centered design. Students then build in order to learn by developing and testing multiple prototypes to help better understand the problem rather than waiting for the perfect solution. Lastly students learn how to refine their models with engineering and fabrication skills based on user feedback.

In a four-year design advisory, students learn design thinking, engineering, and entrepreneurial skills to tackle problems they feel are important. In ninth grade, students focus on building and fabrication. They use low-tech materials such as cardboard and foil as well as the high-tech tools in d.tech's campus fabrication lab (FabLab), like 3-D printers, laser cutters, routers, and programming tools.

In tenth through twelfth grades, students formulate their own design



challenges in areas of interest and communicate their vision to authentic audiences, just as entrepreneurs do when they pitch their ideas. Possible design challenges include redesigning Halloween, improving the casual dining experience, or redesigning morning in their local community.

The school calendar also includes four two-week Intersessions for elective courses.

The Organizational Model: Teachers roles include diagnostician,

THE LEARNING CYCLE



facilitator, and coach. A director of health and wellness focuses on holistic wellness and independent study in physical education. Instructional assistants serve as tutors in the learning hub or as student data specialists.

Teachers have three different career paths: *rock star teachers* focus on successful teaching and community contributions, *teacher leaders* continue successful teaching and take on site leadership roles,

> Students work at their own pace through a standards-based online curriculum to develop deep content knowledge and the ability to apply that knowledge. Within a unit playlist assigned by a teacher. students complete learning activities and assessments to learn the required concepts. Once they build conceptual understanding, they must demonstrate mastery of the unit—before moving on—by completing a performance task. Examples include labs, debates, projects, tutoring other students, and other tasks that synthesize and apply multiple concepts. Students also build design portfolios to show their progress as a designer.

BY THE NUMBERS:

Year 1 public revenue per pupil: \$9,530

Year 1 expenses per pupil: \$12,466 Year 4 revenue per pupil: \$8,970 Year 4 expenses per pupil: \$8,885 Years to sustainability: 3

and *teacher professors* continue successful instruction and take on roles in d.tech's anticipated graduate school of education.

The Operator: d.tech is the first charter school authorized by its local district. It is led by a local team that is taking advantage of its access to Silicon Valley to build a school informed by top technology entrepreneurs, innovators, and educators. For example, Stanford University's d.school has been involved in designing the design advisory class and MBA students in an Executive Education course at Stanford helped design the first few weeks of school. And the Thiel Foundation has reserved 20 spots for d.tech students in their Under 20 Summit, an opportunity to be mentored by top entrepreneurs in Silicon Valley and start developing professional networks.

d.tech has received support from the Oracle Education Foundation and intends to scale up by disseminating its curriculum through networks like the Stanford d.school K-12 network, and by eventually launching a graduate school of education, allowing d.tech to certify teachers and contribute to the research community.

> NEXT GENERATION LEARNING CHALLENGES

nextgenlearning.org

FOR MORE INFORMATION:

School URL: www.dtechhs.org Contact: Ken Montgomery, kmontgomery@dtechhs.org



EDUCATION FOR CHANGE EPIC CHARTER SCHOOL

A NEXT GENERATION SCHOOL MODEL SYNERGIZED WITH NARRATIVE

At Epic, students will learn to see themselves as heroes in their own Epic journey.
MICHAEL HATCHER, PRINCIPAL, EPIC CHARTER SCHOOL

KEY FEATURES:

- Vew School
- Station Rotation, Individual Rotation, Flex Blended Models
- Competency-Based Learning
- Project-Based and Experiential Learing
- Flexible Learning Spaces
- Social-Emotional Development

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 6-8 Location: Oakland, CA Operator: Education for Change Operator Type: Charter Setting: Urban Students at Start: 168 Students at Capacity: 504

MODEL TOOLBOX:

Learning Management System: Google Classroom

Student Information System & Gradebook: Illuminate

Assessment Tools and Approaches: Amplify benchmarks, NWEA MAP, ExitTicket

Digital Content Providers: ST Math, Reading Plus, History Alive, Gooru, Khan Academy, Summit playlists on Activate, Imagine Learning, Duolingo, PLTW LMS

Hardware: Acer 720 Chromebooks, Lenovo Ideapads Y510 for Engineering lab, laser cutter, vinyl cutter, 3D printer The Vision: Adolescents claim their identities and sense of self-worth through narrative. Everyday, students in the Fruitvale neighborhood of Oakland, California, are confronted by two disempowering narratives: the 'street narrative' that invokes a culture of punishment and violence and the 'macro narrative' of culture deficit for urban communities. The charter management organization Education for Change intends to change students' interpretation of these narratives through a student-centered school model with a narrative of its own: a hero's journey.

This narrative structure for Epic Charter School empowers middle school students with sense of unity and purpose in life, where they can feel part of a culture with a shared experience and with more opportunities to experience growth and accomplishment. It structures the middle school experience as a single, ongoing, coherent journey, giving students much more control over the pace of their own journey.

The school's social system is designed intentionally to build character, community, and confidence. The academic program is designed intentionally to develop innovators and engineers who have the skills and confidence to independently design and implement creative solutions to real world challenges.

The Academic Model: The hero's journey is a personalized and immersive educational experience. Design and engineering is front and center so students have authentic opportunities to design solutions to real world problems, prototype those solutions,

and test and iterate on those prototypes using the same technology, programs, and tools used by engineers at Lockheed Martin.

The school culture is embodied in the narrative of the Epic Chronicles: within small learning communities— Houses—students engage in cycles of 6-12 week units that culminate in Quests—live action role plays where students apply their learning to solve real-world problems. Students are given an open-ended problem to solve however they choose, demonstrating their growth and capacity.

Game mechanics drive the school model: students' advance by leveling up through progress paths. They receive daily feedback and rewards, earning points and badges for themselves and their House through academic achievement, social-emotional development, and completing Quests. They engage in multi-playerlike social connection through their Houses and with badges for pro-social behaviors.

Students make progress through 12 distinct levels of mastery, not grade levels—a second-year student could be at copper level in math, platinum level in ELA, and silver in science and history. A data dashboard provides students and adults the ability to daily monitor points, badges, and levels for individual students and Houses using data from mastery-based assessments, social-emotional development, and Quests.

Through blended learning and mastery-based education, students become critical independent thinkers with the capacity to self-direct their learning. First-year students

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BLENDED SUBJECTS: English Language Arts/History, Math/Science, Engineering, PE, Design

have a regular daily schedule with in-class station rotations; through gradual release, third-year students develop their own weekly plans and have greater ownership over scheduling their work and managing longer-term projects.

Students spend more time in their House's Sandbox as they demonstrate increased capacity to self-direct learning. A large room with moveable furniture and smaller adjoining rooms, the Sandbox is a space for collaborative learning, small group discussions, large project work, inde-

HERO'S JOURNEY

pendent work, and small group instruction.

Student choice in what is learned, when it is learned, and where it is learned is combined with strong relationships, relevance, and engagement. This gives students the safety and security to persevere as it taps into their individual interests, and brings joy to learning.

The Organizational Model: Fullycredentialed, experienced teachers are supported by uncredentialed Guides, maintaining an affordable low student-to-adult ratio. Guides



A graphic depiction of the Hero's Journey which aligns to the levels students must progress through to graduate from Epic.

FOR MORE INFORMATION:

School URL: http://www.makeitepic.org/ Operator URL: http://efcps.org/ | Contact: Hae-Sin Thomas, hthomas@efcps.net

BY THE NUMBERS:

Year 1 public revenue per pupil: \$10,952

Year 1 expenses per pupil: \$16,778 Year 4 revenue per pupil: \$11,275 Year 4 expenses per pupil: \$11,260 Years to sustainability: 3

monitor and support students in their digital learning by leveraging analytics data; they mentor students, attend to social-emotional development, and help students with goal-setting. Teachers focus on targeted direct instruction and facilitating rigorous performance tasks and higher-order thinking activities.

The Operator: Education for Change believes it is the right for every child to have access to a high-quality, 21st century education. EFC operates three elementary and two K-8 charter schools within the Fruitvale neighborhood of Oakland, California, with a focus on turning around failing district public schools and dramatically improving outcomes for the students it serves. The charter organization started to employ blended learning in its existing elementary schools. As part of its strategic plan, EFC created Epic to provide students in its elementary schools with a quality middle school option in their neighborhood as well as test and extend the elementary blended learning model.

The charter's leaders are looking to test different elements of Epic's model for scaling within EFC and throughout Oakland: Guides, gradual release blended learning, engineering and design curricula, increased access to feedback and data, the Sandbox, Quests, gamification of school culture, and competency-based progression.



FOUNDATIONS COLLEGE PREP

MARRYING THE BEST TECHNOLOGICAL INNOVATIONS WITH PROVEN PEDAGOGICAL PRACTICE

66 We know that teachers, like students, come into school at different places. It's our goal to maximize every teacher's effectiveness.

MICKI O'NEIL, FOUNDATIONS COLLEGE PREP

KEY FEATURES:

- 🗹 New School
- 📝 Rotation Blended Model
- Next Generation Staffing Model
- College Readiness & Success

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 6-12 Location: Chicago, IL Operator: Foundations College Prep Operator Type: Charter Setting: Urban Students at Start: 112 Students at Capacity: 840

MODEL TOOLBOX:

Learning Management System: Hapara

Student Information System: PowerSchool (limited), SchoolRunner

Gradebook: SchoolRunner

Assessment Tools and Approaches: NWEA, F&P, teacher-created assessments; a frequent assessment cycle informs Flex Time; ExitTicket

Digital Content Providers: iReady, STMath, TenMarks, Reading Plus (pilot), ThinkCERCA (pilot), eSpark

Hardware: Chromebooks (students and staff), iPads

At Foundations College Prep, differentiation is key not just for the students but also for the teachers.

The Foundations team believes that great teachers can transform students' lives. Concerned that large classes and high demands often overwhelm first-time teachers before they even get their feet wet and that the reach of top teachers is no greater than other teachers, Foundations is focused on reimagining the way teachers work and support one another to maximize capacity across the professional spectrum.

The school extends the reach of its best teachers to more students through technology and non-traditional staffing. In large, foundational courses, a master teacher leverages the support of a resident teacher (a teacher with limited experience) and self-paced digital content to provide targeted instruction to 40 students in a flexible environment. Teachers utilize a variety of strategies to meet the goals of students, including station rotations, small-group instruction, problem-based learning, and discussion seminars. While technology helps to support basic skill mastery, teachers focus instructional time on building critical-thinking and problem-solving skills.

Through these differentiated teacher roles, expert teachers have meaningful leadership and reach-extension opportunities while resident teachers hone their skills with smaller groups of students under the guidance of a master teacher. Another possible role is the instructional lead, someone who models excellent teaching half-time and coaches other teachers in their subject area. Expert teachers may also decide to focus solely on excellent instruction without taking on additional responsibilities. Foundations believes this approach provides ongoing support for teachers as they advance in their careers while also ensuring that every student has access to expert teachers.

Maximizing the reach of teachers supports the school's mission of college prep and college success. School leaders strive to have their low-income students attend and graduate college at the same rates or higher than their higher income peers. To do so, college readiness approaches are woven throughout the curriculum and schedule, and even reflected in the classroom design.

In grades 6–9, students start the typical day in Advisory and participate in two 90-minute foundational courses in math and literacy. In large classrooms, students rotate between instruction and group or project work and hone their skills using digital content. Teachers access just-in-time data dashboards as they plan daily rotations. The afternoon block is Flex Time, when every student across the school is flexibly grouped based on both their reading and math levels. In those groups, students rotate through math/reading small groups, digital content, and art or gym.

Technology is woven into each class in different ways: providing interactive videos to supplement instruction, giving students access to remedial or accelerated curriculum to meet their individual needs, providing interactivity during large lectures, or allowing students to continue the conversation online after class ends.



As students advance, their classes deliberately mimic a more collegiate experience. For example, students might participate in a large lecture led by a master teacher with 60 of their peers before moving into small, discussion-based seminars. In other classes, students might watch a Khan Academy lesson online and then participate in an online discussion, much like the structure of online college courses.

Sample 6th Grade Schedule (A Day)

Through partnerships with local universities such as the University of Chicago, high school students have access to current Ph.D. students as mentors and instructors. Mentors and role models acclimate students to the academic side of the college experience by speaking directly to what college is actually like. For the school's high-need population, this might be a student's first real link to college. **BY THE NUMBERS:** Year 1 public revenue per pupil: \$12,780 Year 1 expenses per pupil: \$13,559 Year 4 revenue per pupil: \$11,305 Year 4 expenses per pupil: \$10,358 Years to sustainability: 1

In the end, the Foundations team hopes that the school—personalized for students and teachers, and grounded in a rigorous college prep curriculum—creates learners who can perform as well as or better than their higher-income peers. And technology becomes an essential tool that facilitates an entirely different kind of school, one that re-imagines the way teacher talent and the school day are used.

A DAY IN THE LIFE

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Class	Size	Teacher(s)	Use of Tech		Class	Size	Teacher(s)	Use of Tech	
Advisory	14		Rich Dashboards		Advisory	14		Rich Dashboards	
Reading Foundations	40		Rotation		Writing Foundations	40		Rotation	
Math	40		Rotation		Math Foundations	40		Rotation	
Foundations					Problem Solving	40			
Lunch					Lunch				
Writing Foundations	30		Rotation Optional		Reading Foundations	30		Rotation Optional	
SS/Science Foundations	30-40		Optional		Gym	30-40		Optional	
Interdisciplinary Project	20		Tech-rich		Science Lab/SS Seminar	20		Tech-rich	
Elective	Varies		Varies		Elective	Varies		Varies	
Lab/Small Group	Varies		Lab		Lab/Small Group	Varies		Lab	
Expert Tea	Proficient	Teacher	Resident Teacher		Staff Member	s (Type Varies)			

Sample 6th Grade Schedule (B Day)

A snapshot of a sixthgrader's day. It begins in Advisory, where teachers use data dashboards to inform daily lessons and goal planning. Foundational courses are rotational, allowing students to move between direct instruction and either group work or individual, self-paced content.

FOR MORE INFORMATION:

School URL: http://foundationscollegeprep.org/ | Contact: Micki O'Neil, micki.oneil@foundationscollegeprep.org



LEARNING CHALLENGES nextgenlearning.org

NEXT GENERATION

INNOVATEEDU, INC. BROOKLYN LABORATORY CHARTER SCHOOLS (LAB)

ENTREPRENEURIAL LEARNING. COLLEGE-LEVEL READING AND WRITING. JOYFUL, BUT RIGOROUS LEARNING

We aim to set the standard of excellence in public education by establishing the broad appeal and relevance of next generation and game-based adaptive learning and assessment.

ERIN MOTE AND ERIC TUCKER, CO-FOUNDERS, BROOKLYN LAB

KEY FEATURES:

- 🗹 New School
- Lab, Station, Individual Rotation and À la Carte Blended Model
- Project-Based and Experiential Learning
- Next Generation Staffing Model
- Community Partnerships _

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 6-12 Location: Brooklyn, NY Operator Type: Charter Setting: Urban Students at Start: 132 Students at Capacity: 1,068

MODEL TOOLBOX:

Learning Management System, Student Information System and Gradebook:

Assessment Tools and Approaches: Cortex, Literacy Generation, CoreSpring, Schoolzilla, NWEA MAP

Implementation Partner: InnovateEDU

Digital Content Providers:

ST MATH, Zearn, Cortex, Catalyst Literacy, Play Power Labs, LearnZillion, Learning Registry Index, Brain POP Game Up, Scratch, Duolingo

Hardware: Chromebooks

The Vision: Downtown Brooklyn, New York has 12 universities, 57,000 college students, and the infusion of new tech programs like NYU's Media and Games Network. The Brooklyn Tech Triangle anticipates up to 22,200 direct tech jobs by 2015, 10-15% of New York City's total tech employment.

In the midst of this hub of tech innovation is Brooklyn Laboratory Charter Schools (LAB). Not surprisingly, entrepreneurial learning is the backbone of the school network, created to prepare 6-12th graders, including English language learners and students with disabilities, with the academic foundation, digital literacy, and leadership skills necessary to succeed in college and professional life as they grow as ethical leaders. LAB is designed to educate high-need urban students and to make the learning experience fun.

The Academic Model: LAB's academic model combines empirically effective learning practices with innovative implementation strategies, including a blended learning model that integrates high-dosage tutoring with game-based adaptive courseware and teacher-led lessons, all grounded in deeper learning expectations and the Common Core State Standards.

Entrepreneurial Learning: LAB fosters interest-driven learning and instills a sense of awe and curiosity in the face of challenges. It supports academic learning as well as social and emotional needs like mindfulness, persistence, and grit. Students work daily with designers and entrepreneurs in

the 360Lab on activities such as robotics, coding, and game design. 360Lab's multi-age, challenge-based activities foster key career skills and allow students to discover their passions.

Literacy and College Prep: Through mastery-based progression, LAB prioritizes research- and evidence-based writing and close reading of foundational works of literature, poetry, philosophy, history, economics, mathematics, and science. Progressions are woven into the daily practices of teachers and students, while next generation tools provide timely feedback and reassessments. With 195 minutes of literacy instruction daily, students learn to read with comprehension and insight, and analyze and effectively respond to texts across disciplines.

Effective Instruction: LAB's instructional model combines trained staff, ongoing professional development, specialized curricular materials, extra time, tutoring, and in-class supplementary support services. Master teachers lead each class, supported by quality digital courseware and assessment alongside a corps of five-tosix tutors per classroom. Teachers curate Common Core-aligned playlists from multiple providers' content in Cortex, InnovateEDU's operational, instructional, and assessment platform.

Next gen learning and assessment: Teachers and tutors use results from frequent, embedded, formative assessments to personalize instruction enhanced by Cortex. Students use adaptive, game-based courseware and a variety of open educational resources (OER) to work at their own



pace. As students complete activities, embedded assessments give real-time feedback and badges. Students, teachers, tutors, and parents access dynamic, validated, actionable feedback about students' performance, skills mastery, and growth in Cortex.

Extended Learning Time: LAB extends learning with at least 195 nine-hour school days per year plus summer, Saturday, and early-morning opportunities. Extended time is feasible and sustainable given the tutoring, blended learning, 360Lab enrichment courses, and community

BIRD'S EYE VIEW

partnerships in LAB's model.

<u>Culture of High Expectations:</u> LAB sets uncompromising standards for academic and social behavior and insists that every student, when supported, is capable of college success. Structure and predictability minimize chaos and disruptions, especially unsettling to the learning of students with certain disabilities. And achievement is continuously celebrated in a joyful and engaging learning environment.

The Organizational Model: LAB is co-located with InnovateEDU, a non-profit which brings together uncommon allies in education



In each classroom, students have the ability to rotate through three learning experiences tailored to their pace, progress and mastery against standards. Tutors work with one half of the students in groups of one to three students per tutor, focusing on remediation, practice, and reinforcement. The second half of students is further divided into two small groups. Master teachers provide direct instruction to one small group while a second small group works independently on digital courseware.

FOR MORE INFORMATION:

BY THE NUMBERS:

Year 1 public revenue per pupil: \$13,527

Year 1 expenses per pupil: \$22,725 Year 4 revenue per pupil: \$17,654 Year 4 expenses per pupil: \$17,057 Years to sustainability: 3

from entrepreneurs to designers to develop K-12 digital tools to serve, inform, and enhance teaching and learning. InnovateEDU is working to develop the open source digital platform Cortex, in partnership with Design Innovation Factory as well as LAB and other next generation schools.

The design of Cortex interconnects instructional tools, digital content, learning games, formative assessments, and administration applications, and captures a rich picture of each student's learning progress within student-centered, mastery-based, blended instruction.

Development and user testing in partnership with schools ensures that features are informed by needs and design requirements rather than speculation about what a next generation classroom needs.

The Network: LAB is a new network of public charter schools that opened its first school in Fall 2014. LAB is committed to dramatic growth and scale by creating a cluster of schools in Brooklyn. LAB's founders believe that by convening students, educators, and designers in short cycle innovation alongside partner InnovateEDU, they will create disruptive, scalable learning tools and models to transform the future of learning and extend the scale of the LAB model well beyond its Brooklyn campuses.

School URL: http://www.brooklynlaboratoryschool.org/ Network: http://www.innovateedunyc.org/ | Contact: Eric Tucker, eric@brooklynlaboratoryschool.org



MATCH NEXT

LEVERAGING SMALL-GROUP INSTRUCTION TO ENGAGE STUDENTS AND MAXIMIZE TEACHERS

One of the most exciting pieces of this model is that our tutors are going to be spending an incredible amount of time with their students. They are going to get to know them extremely well. They can set the pace based on the students' needs and move more quickly into higher order activities.

RAY SCHLECK, MATCH EDUCATION

KEY FEATURES:

- Vew School
- Flex Blended Model
- Next Generation Staffing Model
- **Flexible Learning Spaces**

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 5–8 Location: Boston, MA Operator: Match Education Operator Type: Charter Setting: Urban Students at Start: 50 Students at Capacity: 200

MODEL TOOLBOX:

Student Information System: Powerschool Gradebook: Powerschool Assessment Tools and Approaches: Achievement Network Hardware: ChromeBooks, Kindle When Match Next opens in inner-city Boston in fall 2014, it will build on the success of the "no excuses" charter's existing schools, Match Charter Public School (6–12) and Match Commnity Day (currently K1, K2, 2, 3; eventually K–12).

Match Next builds on one of the most successful practices of the original Match schools - high-dosage tutoring. In the original Match model, each student receives two hours of supplemental tutoring each day in addition to traditional classroom instruction. In the Match Next model, students will not spend any time in a traditional classroom, and instead will work directly with tutors, and targeted technology, for all of their instruction. Master teachers will closely supervise tutors and develop and manage the overall curriculum and instructional model. During the school day, students will work through digital content (matched to their level of understanding and mastery) and participate in small group discussions and activities.

The small-group approach allows a tutor to get to know students on a more intimate level, understanding their unique learning styles and potential challenges. The tutors can leverage those connections to design engaging activities—discussions, debates, and problem-solving sessions—that match students' interests and skill levels. Technology is used to maximize the quality of instruction. The model also frees a master teacher to circulate through the room, pulling aside students who might need more intensive remediation or observing the tutors to generate feedback for the next day's morning strategy session. Each master teacher will have access to a real-time data dashboard to pinpoint students who might be struggling with a specific lesson or concept.

The goal is to provide students with a high-touch, deeply personalized experience that still fosters a sense of collaboration and engagement with their peers and instructors. By leveraging tutors for instruction, a single



BY THE NUMBERS:

Year 1 public revenue per pupil: \$16,225

Year 1 expenses per pupil: \$19,349

Year 4 revenue per pupil: \$16,920

Year 4 expenses per pupil: \$16,788

Years to sustainability: 4

master teacher can provide support to a much larger number of students. This model allows a given school to leverage the talent of a smaller number of exceptional teachers – a rare commodity.

The use of digital content will provide high-quality instruction and data monitoring tools that supplement the work of tutors. Match envisions its new school as a technology research platform that can generate reality-based knowledge about which technology and tools work best with low-income, inner-city students kids who must make rapid academic gains to reach grade-level proficiency (and then excel further). "In the Match Next model, students will not spend any time in a traditional classroom, and instead will work directly with tutors, and targeted technology, for all of their instruction."

The organization has built a strong relationship base to share its knowledge, including regional partnerships in Newark, Houston, Denver, and New Orleans. By disseminating "what works" about its model and training processes, Match hopes to serve a growing community of blended learning schools rather than simply multiply its own.

Match Next began piloting its

model with the fourth grade class at Match Community Day in 2013-14. Fifty fourth-grade students spend half of their day in traditional classes and the other half of the day in a Match Next pilot classroom. This pilot allows Match Education to test the new model and iron out any issues before opening a full-time school in the fall of 2014.

MATCH NEXT CLASSROOM CONFIGURATION



Match classrooms will be flexible, allowing teachers and students to reorganize tables for discussion or remediation. In a typical configuration, each table will have three students and a tutor. A master teacher circulates the room to provide feedback, support, and to pull out students who might need further remediation.

FOR MORE INFORMATION:

Operator URL: matcheducation.org | Contact: Meredith Liu, meredith.liu@matcheducation.org



MONTESSORI FOR ALL MAGNOLIA MONTESSORI

A STUDENT-CENTERED LEARNING EXPERIENCE FOR DIVERSE COMMUNITIES

Montessori For All believes that Maria Montessori, the founder of the Montessori movement, would actually embrace modern technology, since her goal was to create adults who were well-adapted to the world.

SARA COTNER, FOUNDER AND SUPERINTENDENT, MONTESSORI FOR ALL

KEY FEATURES:

- Vew School
- Individual Rotation Blended Model
- Competency-Based Learning
- Project-Based and Experiential Learning
- Social-Emotional Development

AT A GLANCE:

Start Date: Fall 2014 Grades Served: PK-8 Location: Austin, TX Operator: Montessori for All Operator Type: Charter Setting: Urban Students at Start: 300 Students at Capacity: 550

MODEL TOOLBOX:

Digital Content Providers: Duolingo, Khan Academy, LearnZillion, Scratch, No Red Ink, Blogger, iMovie, Microsoft Office, Adobe Suite

Hardware: MacBooks, iPads

The Vision: Montessori For All endeavors to create LEADERS who:

- Live with integrity and courage Eager to learn
- Appreciate and show gratitude Demonstrate persistence
- Excel

Respect and help others and the environment

Montessori schools have provided transformational educational experiences for more than a century. They are built around self-directed and hands-on learning that allows students to practice critical thinking, problem solving, collaboration, investigation, and conflict resolution.

However, while Montessori schools foster the development of self-direction, executive functioning, innovation, and collaboration, many public Montessori schools fail to ensure that all children master the basic skills they need to excel on standardized tests. At the same time, high-performing charter schools serving low-income communities ensure that their students master state assessments but struggle to get their students to complete college.

And so, the school's founders created a new school model that blends the best of authentic Montessori schooling with best practices from high-performing charter schools in a blended learning environment.

The Academic Model: Montessori For All is grounded in a philosophy of educating the whole child, attending to their minds, bodies, and hearts. Its leaders are committed to student development academically, intellectually, socially, emotionally, creatively, culturally, and physically. Blending Montessori and high-performing charter approaches, Montessori For All provides standards-based experiential learning. Teachers align Montessori materials with state standards and serve as guides as children master concepts within a 100% personalized curriculum.

To meet the needs of each student, individualized work plans direct lessons which occur one-on-one, in small groups, or online.

Students develop deep understanding through hands-on materials, using manipulatives in every subject area to deeply internalize concepts. Their learning extends beyond the classroom through enrichment activities like gardening, woodworking, forensics, and theater. Students work on rigorous academic material in ways that help them develop the executive functioning skills they will need for success in college, the ever-changing global economy, and life in their families and communities. They develop these skills by practicing them daily. Even the youngest of children move around classrooms and learn to navigate it, with guidance.

Montessori For All prepares students for a global, multicultural society by attending a racially, culturally, and socio-economically diverse school. And its dual-language approach ensures that all children are bilingual and bi-literate in Spanish and English by the end of eighth grade.

Technology is an important tool for the Montessori For All model, a tool to create and a tool to support differentiated instruction, practice, and



assessment. Students use software to write, blog, illustrate, and film. Montessori's model requires a gradual release from concrete hands-on materials to more abstract learning. which promotes deep conceptual understanding. With digital content tools, students practice abstraction of concepts with real-time feedback while providing data for teachers on student performance.

The Organizational Model: The school's leaders have made a heavy investment in core teaching staff because they firmly believe that educating the whole child in high-needs high-poverty, areas requires more teachers, not fewer. They accomplish this goal within a sustainable budget by adopting a one-room schoolhouse model with

THE BEST OF BOTH WORLDS



English Language Arts, Math

multi-age classrooms, where art, music, and physical education are incorporated into the core content classroom. Administrative human resources are intentionally lean.

A lead teacher "guide" works with an associate "guide" in each classroom with students in three different grade levels. This design creates an authentic teacher development process, an opportunity for teachers to monitor a student's trajectory over three years and build trusting relationships with families, a natural environment of differentiation where every student is working on something different, and a chance for students to take on different roles at different times—where they can both learn from and mentor other students at different levels.

BY THE NUMBERS:

Year 1 public revenue per pupil: \$8.677

Year 1 expenses per pupil: \$6,142 Year 4 revenue per pupil: \$7,101 Year 4 expenses per pupil: \$6,242 Years to sustainability: 3

The Operator: Montessori For All is a new charter management organization (CMO)-the first CMO incubated in Austin. Montessori For All seeks to help all children, regardless of family income, gain access to a transformational education through four strategies.

- 1. Open high-performing, authentic, public Montessori charter schools that can serve as lab schools and proof points.
- 2. Codify a comprehensive "whole child" curriculum that others can adopt.
- 3. Create teacher-training centers to increase the pipeline of effective public Montessori teachers.
- 4. Consult with school districts and policymakers to develop and strengthen public Montessori programs.



The Montessori For All model takes the best of authentic, traditional Montessori practices and mixes them with the best of high-performing charter practices to create a unique, effective approach to educating students in a diverse school community. FOR MORE INFORMATION:

School URL: http://magnolia.montessoriforall.org/

Operator URL: http://montessoriforall.org/ | Contact: Sara Cotner, saracotner@montessoriforall.org


PIEDMONT CITY SCHOOL DISTRICT PIEDMONT MIDDLE SCHOOL

CHANGING RURAL STUDENTS' FUTURES WITH RELEVANT, ENGAGING LEARNING OPPORTUNITIES

KEY FEATURES:

- Complete Redesign
- Flipped Classroom, Individual Rotation, Flex Blended Model
- Competency-Based Learning
- Project-Based and Experiential Learning
- Higher Education and Community Partnerships

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 6-8 Location: Piedmont, AL Operator: Piedmont City School District Operator Type: District Setting: Rural Students at Start: 275 Students at Capacity: 290

MODEL TOOLBOX:

Learning Management System: Blackboard, Ed Elements

Student Information System:

STI's InformationNOW, Ed Elements Gradebook: Blackboard, Mastery Connect

Assessment Tools and Approaches: Mastery Connect

Implementation Partner: Ed Elements

Digital Content Providers:

Compass Odyssey, IXL Math, TenMarks, Classworks, Think Through Math, Discovery Ed, Brain Pop, Study Island, No Red Ink, Stride Academy, Global Scholar, Mathalicious, Reflex Math, iStation

Hardware: Macbook Air

66 Piedmont Middle School will challenge the status quo for what a successful rural district school can look like.

MATT AKIN, SUPERINTENDENT, PIEDMONT CITY SCHOOL DISTRICT

The Vision: Piedmont City School District is a high-performing district that launched the "mPower Piedmont" initiative in 2010 to create citywide wireless Internet access, provide laptops to every student, and invest in digital content. The efforts improved state assessment scores. Even though graduates were well-prepared, many remained in poverty due to limited opportunities in the region or limited exposure to college and career options. A Gallup poll of students revealed that their sense of hope, engagement, and well-being was troublingly low.

District leaders decided to create a new school and community culture filled with hope and opportunity through "mBolden Piedmont" by redesigning teaching and learning with the now available technology, starting in middle school. They wanted to provide a more enriched educational experience, increasing exposure to careers and college through career immersions and global project-based learning opportunities.

The personalized, blended learning school model fosters students' ability to set and achieve goals, solve problems, and develop important non-cognitive skills like grit and tenacity.

The Academic Model:

Advanced Mastery: Piedmont expects students to master state standards through hands-on projects, original creations, and experiments, not just multiple-choice tests. Teachers guide students to advance through standards using adaptive digital content at an individual pace while demonstrating deeper understanding of core concepts through interdisciplinary projects and performance assessments. The curriculum is not bound by grade levels or seat time.

Relevance: The school also emphasizes relevant learning experiences and connections to people in the local community and beyond, drawing a direct line to students' futures. Students might share a new robot design with a grad student at Jacksonville State University or present a strategic plan to local business leaders for improving Main Street. And students take surveys regularly to discover career interests; teachers then create learning opportunities relevant to each student's life goals.

Student Ownership: With 24/7 citywide Internet access and devices for each student, anytime, anyplace learning is a reality for all students. During Class Time, students have control over their learning pace and they have choice in demonstrating mastery through digital content and project-based learning.

Students self-direct their learning during My Time, a daily flex block for independent learning that can be used for remediation, content mastery, advanced mastery, project completion, and career exploration. Students work off of action plans they make during Goal Time.

Students meet in small teams during Goal Time (aka Team Time) with a teacher who serves as their mentor/advisor throughout middle school. Students set short and longterm goals, experience hands-on



50% Percentage of Student Time Using Digital Content for Core Literacy and Math BLENDED SUBJECTS: Math, English/Language Arts,

Science, Social Studies

BY THE NUMBERS:

Year 1 public revenue per pupil: \$6,893

Year 1 expenses per pupil: \$7,251 Year 4 revenue per pupil: \$7,346 Year 4 expenses per pupil: \$7,209 Years to sustainability: 4

learning, and interact with college students, professors, or working professionals.

The Organizational Model: The school has taken a phased approach to implementing its redesign. Through ongoing professional development, each subject-area teaching team is building expertise in one aspect of the model each year over three years.

Teachers spend about half of daily My Time analyzing student data with their grade level teams and they participate in bi-weekly professional development sessions on small group instruction, one-to-one instruction, project-based learning, and data analysis.

In partnership with Jacksonville State University, Piedmont is <u>creating</u> <u>a corps of blended learning teachers</u> for Piedmont and surrounding districts. Under the guidance of master teachers, student teachers benefit from year-long, hands-on training in the district's blended model.

The Operator: The district is located in a small community of 5,000 residents in northeast Alabama and serves about 1,200 students in the region. After three years of phasing in the mBolden model at the middle school, it will be scaled up to the high school and down to the elementary school. Middle school teachers will

serve as the core group of trainers for district-wide professional development.

As a member of the Digital Promise League of Innovative Schools and Verizon Innovative Learning Schools as well as a founding member of the Alabama-based Collaborative Regional Education (CORE) initiative, Piedmont has multiple networks through which to disseminate best practices across the state and country. Piedmont City School District recognizes it can become a national model of innovation for rural schools and districts—the kind of districts that serve the majority of students in over half the states.

PHASED IM	PLEMENTATION	YEAR 1	YEAR 2	YEAR 3	
	Teacher Expertise: Areas of model where grade level teaching teams are experts	1	2	3	Expansion
****	Advanced Mastery: Phases of implementation of competency- based, project-based learning	Projects as assessment	- Projects as learning	Refine the model	to 5" Grade
GOAL TIME	Partnerships: Grades supported by relationships with homegrown professionals and colleges	Grade 8	Grades 7, 8	Grades 6, 7, 8	
C	Exploratories: Number of class- based and online Exploratories offered	4	8	12	Expansion
MY TIME	Flex Time: Percent of time spent in My Time	20%	35%	50%	to 9º Grade
	Digital Content: Number of providers teachers use	2-4	3-5	4-6	

To manage the redesign of an existing school, Piedmont has a three-year plan. For Class Time, teachers build their expertise in one area of the model each year, starting with either project-based learning, integrating digital content, or effective advisory time. To rollout competency-based projects in Class Time, focusing on advanced mastery, teachers began by identifying critical standards for learning and are gradually implementing the significant pedagogical shifts required by the model—starting with projects as assessment. Resulting interdisciplinary project-based opportunities evolve by subject area and by the depth of the project. The school is phasing in key elements of Goal Time and My Time in similar ways.

FOR MORE INFORMATION:

School URL: http://www.piedmontmiddle.org/

Operator URL: http://www.piedmont.k12.al.us/ | Contact: Matt Akin, makin@piedmont.k12.al.us



THRIVE PUBLIC SCHOOLS

HANDS-ON, MINDS-ON ENGAGEMENT ENHANCED BY TECHNOLOGY

Students today need to learn how to be adaptable and reflective, employing critical thinking skills and creativity in a variety of contexts. Our schools must also be adaptable and reflective, flexibly meeting the needs of each and every one of our students.

NICOLE TEMPEL ASSISI, FOUNDER

KEY FEATURES:

- Vew School
- Station Rotation, Lab Rotation, and Flex Blended Model
- Competency-Based Learning
- Project-Based and Experiential Learning
- Social-Emotional Development

AT A GLANCE:

Start Date: Fall 2014 Grades Served: K-8 Location: San Diego, CA Operator: Thrive Public Schools Operator Type: Charter Setting: Urban Students at Start: 60 Students at Capacity: 750

MODEL TOOLBOX:

Student Information System & Gradebook: Illuminate

Assessment Tools and Approaches: Illuminate, NWEA/MAP, DIBELS Performance-based Assessment, Exhibitions, Student-Led Conferences

Digital Content Providers: ST Math, Think Through Math, Khan Academy, Activate, Reading Plus, Razz, Lexia Core 5, Brain Pop, other OER as needed.

Hardware: K-4: iPads, Chromebooks; 5-8: Chromebooks 1:1, iPads. Afterschool: desktop minilab. Teachers: Chromebooks, desktops, iPads **The Vision:** Imagine a school that is flexible enough to meet the needs of every student it serves. Imagine a school that adapts to the needs and strengths and passions of those students. Imagine a school where students learn by tinkering, getting their hands on real live objects to create a solution to a real live problem. Imagine a school with "Just Right Instruction" where each student learns what he or she needs when he or she needs it.

Thrive Public Schools' founders didn't want to only imagine this school, they decided to build it. Thrive is a K-8 charter school in San Diego that prepares students to be community-minded, college-prepared, and career-inspired.

The Academic Model: Thrive is designed to serve a population of students that has increasingly become disengaged from traditional school models. Thrive balances tech-infused learning with hands-on, minds-on engagement to cultivate excitement, motivation, and passion in students whose needs have not been met in more traditional settings. Thrive expands the concept of school beyond core academics to encompass social-emotional intelligence and "real world" understanding.

The blended learning model at Thrive integrates technology throughout a curriculum built upon project-based learning, targeted instruction, and tinkering. Students progress at their own pace, receiving targeted support and instruction as needed to ensure they master content before moving on. A personalized learning plan for each student tracks goals, modalities, and growth. Students have multiple opportunities to develop and demonstrate depth and complexity as they apply learning in different contexts.

Through **project-based learning**, students learn subject-matter content in cross-disciplinary teacher-created projects where they use technology to research, design, invent, film, edit, record, experiment, build, create, and present. Teachers personalize learning and foster students' active ownership over their learning through interactive digital learning programs that provide instant data for teachers and real-time feedback for students and parents.

Creative and inquisitive thinking is cultivated by **exploratory learning** in tinkering, robotics, visual and performing arts, engineering, and community-based experiences. And families are supported to become a source of **family-facilitated learning** through engaging, fun learning opportunities rich in technology, rather than "homework."

Social-emotional learning is interwoven throughout the school's model, emphasizing students' self-actualization through high standards for student behavior, applied learning, student choice, and continuous feedback. This involves solid decision-making, self-regulation, self-reflection, and learning from struggles, trial, and error.

The Organizational Model: To create deeper relationships with teachers and their peers and to increase personalization, students are grouped in mixed age clusters after Kindergarten, and "loop" with the same teacher-teams for two years.

Teachers participate in ongoing data reviews to make certain that all



30% Percentage of Student Time Using Digital Content for Core Literacy and Math BLENDED SUBJECTS: English language arts, Math

students are achieving academically. They review data collaboratively to plan necessary lessons, interventions, and instructional strategies to help each and every student succeed. Additionally, teachers set up and support student-led conferences, where students present their data and goals to their families.

Thrive's leaders recognize that the innovative school model presents challenges for teachers and that's why they provide teachers almost 300 hours annually for collaborative planning, data review, and professional development. Teacher PD is experiential, collaborative, sustained, and intensive, supported by modeling, coaching, and problem solving.

With Illuminate, Thrive is creating an "Are Students Thriving" Dashboard that integrates data from multiple digital learning programs. Eventually, the dashboard system will allow Thrive's educators to identify quickly where extra supports are needed, assign coaching, help drive instructional decision-making, and provide a portal for parents and students. This is still a work in progress.

The Operator: Thrive Public Schools is a new charter management organization, founded to create a blueprint for change in public education. Building upon prior experiences at three highly successful charter organizations, High Tech High, Camino Nuevo and Da Vinci Schools, Thrive's leaders know that their model can be sustained on California's public revenues, which are among the lowest in the nation. They envision Thrive as a

BY THE NUMBERS:

Year 1 public revenue per pupil: \$9,846

Year 1 expenses per pupil: \$9,715 Year 4 revenue per pupil: \$9,361 Year 4 expenses per pupil: \$8,749 Years to sustainability: 2



The greater purpose of learning at Thrive is not only to learn to DO, but also to learn to BE. The model personalizes learning to create great human *doings*—and human *beings*.

network of schools that demonstrates a cost-effective model of public education that can readily be replicated in other communities.

A DAY IN THE LIFE Targeted Instruction Community Time Project Based Exploratory Learning							
TIME	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY		
8:00-8:50	Family Facilitated Learning						
9:00-9:45	Morning Meeting	Morning Meeting	Morning Meeting	Morning Meeting	Morning Meeting		
9:45-10:55	ELA Rotation	ELA Rotation	Flex Time (ELA or Math)	ELA Rotation	ELA Rotation		
11:00-12:10	Math Rotation	Math Rotation		Math Rotation	Math Rotation		
12:15-1:00	Lunch/Recess	Lunch/Recess	Lunch 12:20 Dismissal 12:40	Lunch/Recess	Lunch/Recess		
1:00-2:00	Project Based Learning Science	Project Based Learning Science	Teacher Professional	Project Based Learning Science	Project Based Learning Science		
2:10-3:05	Exploratory	Exploratory	Development and Planning	Exploratory	Exploratory		
3:05-3:15	Afternoon Meeting	Afternoon Meeting	1:00-3:00	Afternoon Meeting	Afternoon Meeting		
3:15-4:15		Family Facilit	ated Learning				

FOR MORE INFORMATION:

School URL: http://www.thriveps.org Contact: Nicole Tempel Assisi, nassisi@thriveps.org



NEXT GENERATION LEARNING CHALLENGES

nextgenlearning.org

VALOR COLLEGIATE ACADEMIES

PERSONALIZED LEARNING FOR DIVERSE LEARNERS AND TEACHERS

At Valor, we believe that our school models must change over time to support healthy adolescent development. We call that transition 'Gradual Release.'

TODD DICKSON, FOUNDER AND CEO

KEY FEATURES:

🗹 New School

- Station Rotation, Lab Rotation, and Flex Blended Model
- Next Generation Staffing Model
- Higher Education Partnership
- Social-Emotional Development

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 5-12 Location: Nashville, TN Operator: Valor Collegiate Academies Operator Type: Charter Setting: Urban Students at Start: 150 Students at Capacity: 1,120

MODEL TOOLBOX:

Learning Management System: Activate Instruction, Kickboard

Student Information System: PowerSchool, Illuminate

Assessment Tools and Approaches: Illuminate

Digital Content Providers:

Middlebury PowerSpeak K-12 World Languages, iReady, Khan Academy, Curriculet, Scratch, Code Academy, Achieve 3000

Hardware: Chromebooks

The Vision: When the Valor leadership team began to design a next generation school, they first asked: How can we create a school that prepares <u>all</u> students to succeed in college and live inspired, purposeful lives?

They then identified three critical needs: (1) Schools in the U.S. are more segregated now than in 1950. (2) The country needs more great educators and new ways to attract, develop, and retain top talent in education. (3) A negative consequence of higher accountability is the narrowing of the curriculum at a time when skills needed for success in college and beyond are more focused on high emotional intelligence.

They also visited high-performing schools that are employing radically different models, like Summit Public Schools, Denver School of Science & Technology, High Tech High, and Uncommon Schools. They ended up with four principles to guide their school design:

- 1. Reflect the diversity of both our country and local community.
- 2. Personalize a student's experience to meet his/her unique academic and non-academic needs.
- 3. Leverage a strong school community to create self-directed learners.
- 4. Develop a new approach for selecting, training, <u>and</u> retaining great teachers.

The Academic Model: Valor is purposefully designed to serve a diverse, mixed-income student population—academically, it allows for multiple perspectives that can improve self-awareness and critical thinking; and socially, it prepares students to live and work in diverse communities.

In a school where a single model needs to work for all students across a wide range of backgrounds, academic preparation, and life experience, Valor created a "gradual release" personalized learning design with four stages. Based on research on adolescent development, the design allows students to take greater control and responsibility as they progress from 5th to 12th grade.

Mastery and pace: Competency-based grading requires students to master all course standards as well as "VCA competencies" (higher-order combinations of course standards). Students incrementally set their own pace across the four stages, from within a single lesson unit in Stages 1 and 2 to within and across courses by Stage 4.

Social-emotional learning: Valor is passionate about whole child personalization with rigorous data-driven instruction in non-academic areas of student growth. This involves collecting and using non-cognitive data to inform instruction as well as a mentoring program that leverages the powerful personalization that comes from great relationships between teachers and students.

A faculty mentor meets with each student weekly and oversees the student's development over the course of eight years. Mentor groups engage in community-building activities and a curriculum focused on social-emotional learning, teen wellness, meditation, and fitness.



The Organizational Model: The instructional shifts across stages translate into shifts in staffing, which emphasizes content experts in the early stages and in the later stages uses both content experts and coaches who have expertise in non-cognitive skill development.

Teachers work in groups of two to four, depending on stage and subject area, to teach an academic course. This enables flexible grouping and teacher roles can shift based on strengths and topics.

To train teachers in the Valor blended model, students admitted into Vanderbilt University's Masters of Education/Credential program are selected to participate in the Valor Apprentice program and offered a \$15,000 stipend. Apprentice teachers work with a master Valor teacher during Academic sessions and then teach their own Expedition course where they are observed and coached by Valor and Vanderbilt faculty.

Foreign Language, Science

Valor provides teachers with 57 days per year of personalized professional development. Following a learning map, professional development experiences include real-time team teaching practice with video, role playing, in-depth content exploration, and data analysis and action plans. The frequent breaks in Valor's calendar support ongoing professional development, teacher resilience, and retention.

The Operator: Valor Collegiate Academies is a new charter management organization in Nashville, TN that plans to open six schools over five years to serve 3,200 students. The school district in Nashville has expressed interest in importing key pieces of Valor's model into local public schools, an opportunity for Valor to extend its reach.

Valor is interested in taking on some of the leading work in social-emotional learning. They are working with Six Seconds to build learning maps, standards, assessments, and playlists for key non-academic areas and with Kickboard to build a dashboard/platform to manage non-academic data. The end result will be that students, teachers, and families can set goals, have discussions, design learning paths, and ultimately grow in these important areas

GRADUAL RELEASE FROM "FOUNDATIONS" TO "LIFE U"

	Stage 1 5 th & 6 th	Stage 2 7 th & 8 th	Stage 3 9 th & 10 th	Stage 4 11 ^{1h} & 12 th
	Foundations	HS Prep	College Prep	Life U
Adolescent Development	Seeks community and validation from adults	Seeks community and validation from peers and adults	Beginning to individuate; seeks wider community	Seeks autonomy and leadership; seeks place in larger community
Mastery and Pace	Unit "cap" + deeper differentiation	Unit "cap" + deeper differentiation	Course "cap" + deeper differentiation	Uncapped + modeled/actual college courses
Use of Blended Learning Technology	Peripheral + Complementary	Complementary	Complementary	Complementary + Core
Instruction Model	Small class rotation + learning lab	Large class rotation + learning lab	Large class rotation + learning lab	Flex model
Class Size	30 (1-2 teachers)	50 (2-3 teachers)	100 (4 teachers)	130 (2-4 teachers)

idents progressively rn more autonomy and ntrol over their learning th as they demonstrate y academic and nonademic skills. Blended struction mirrors that adual release. Stage 1 edominantly features rect instruction with me group work using daily Learning Lab tation. Stages 2 and use station rotations thin classrooms age 4 involves a flex odel with significant rsonalized Tearning ne where students sign their own "learning th" of both in-person d online content d receive targeted aching.

NEXT GENERATION LEARNING CHALLENGES

nextgenlearning.org

FOR MORE INFORMATION:

School URL: http://www.valorcollegiate.org/ Contact: Todd Dickson, tdickson@valorcollegiate.org



VERTUS CHARTER SCHOOL

YEAR-ROUND CAREER PREP HIGH SCHOOL FOR BOYS

66 Our name invokes virtue, tradition, and manhood. Our school's theme is courage, leadership, responsibility: the virtues that the young men who attend our school aspire to.

LEIGH MCGUIGAN, FOUNDING CEO, VERTUS CHARTER SCHOOL

KEY FEATURES:

- 🗹 New School
- Lab Rotation Blended Model
- Competency-Based Learning
- Next Generation Staffing Model
- Social-Emotional Development
- 🗹 Career Readiness

AT A GLANCE:

Start Date: Fall 2014 Grades Served: 9-12 Location: Rochester, NY Operator: Vertus Charter School Operator Type: Charter Setting: Urban Students at Start: 96 Students at Capacity: 384

MODEL TOOLBOX:

Learning Management System: Edgenuity

Student Information System: School Tool

Gradebook: Edgenuity

Assessment Tools and Approaches: NWEA MAP, Edgenuity

Digital Content Providers: Edgenuity

Hardware: Dell desktops and laptops, Samsung tablets, Edgenuity media, client servers **The Vision:** Invoking the culture of elite private schools for boys, Vertus Charter School prepares leaders of character for the community and the workplace.

Vertus is an innovative year-round career prep high school serving boys of Rochester, New York who otherwise would face high odds of dropping out, violence, unemployment, and prison.

Boys are in crisis: Less than 9% of African American boys and less than 10% of Latinos in Rochester graduate from high school. Only 5% of graduates are college ready. Homicide is the leading cause of death among Rochester's adolescents. And 32% of the city's African American men will spend time in prison. Vertus is designed—from the ground up—to meet the needs of these young men.

The Academic Model: The academic culture of Vertus is a combination of traditional values and high-tech tools where students are expected to earn a New York State Regents diploma and a technical certificate or job credential. The school design has four pillars.

<u>1. Strong Relationships:</u> Students at Vertus are surrounded by adults who inspire them to see new possibilities, help navigate personal challenges, and guide their development into successful adults. The 96 students per grade are divided into two houses with four learning teams each. The 12-14 boys in a learning team are led by a preceptor—an educator, guide, role model, and mentor—who stays with the team throughout the school day.

2. Personalized Year-Round Academics: With a year-round calendar, students spend more time in school and less time on the street. A personalized learning plan builds on each student's current level of readiness. Students take online core courses provided by Edgenuity working individually in a learning lab. Online learning is supplemented with in-person learning and support. Each student is pulled out at least once a day for small group work in Skillshops facilitated by a teacher.

3. Character Education: A preceptor leads a daily seminar focusing on character development, habits of work, and habits of mind. The literacy-driven curriculum stresses reading, writing, and presentation. With individual life plans, students set their own short and long-term goals for academics, character, and career.

<u>4. Career Preparation:</u> Vertus' founders believe that students in deep poverty need to be able to support themselves. Vertus expects the majority of its graduates to go on to and graduate from college. Every

"Students at Vertus are surrounded by adults who inspire them to see new possibilities, help navigate personal challenges, and guide their development into successful adults."



BY THE NUMBERS:

Year 1 public revenue per pupil: \$15,812

Year 1 expenses per pupil: \$22,900 Year 4 revenue per pupil: \$15,812 Year 4 expenses per pupil: \$14,600 Years to sustainability: 4

graduate is expected to leave Vertus with a credential that will pave their way into a skilled job. The goal is that they will always have a way to support themselves and contribute to their family.

The Organizational Model: The schools' leadership structure involves an instructional core where teachers are "learning engineers" whose job is to understand where every student is and make sure they have the right lessons, tools, and supports; to create and guide group projects; and to provide one-onone instruction. The academic dean and preceptors are responsible for

A CAREER PREP LADDER

student motivation, looking after the young men, and making sure they get what they need. The reconceived roles are more doable by a deeper talent pool of talented and highly motivated "ordinary" professionals than relying on highly-effective "superhero" teachers. Vertus has also restructured its workforce with full-day/full-year employees.

The Operator: Vertus is a new charter organization that opened its first school in Rochester. Its founders have a collective history of effectively serving urban boys in both Cleveland and New York City, running schools and charter systems and promoting educator quality.

Through its internal leadership pipeline and training program, Vertus anticipates it can open additional new schools that are led by experienced preceptors trained at current Vertus schools. Each school establishes a new pipeline. The founders are also looking to build the structures, systems, and processes of centralized organizations where great technology, learning management strategies, hiring processes, etc., can be scaled in turnkey fashion beyond Vertus' direct control.



Career education is designed with local employers, based on their employment needs, and includes workplace visits, internships, career and technical certification, and courses at local colleges and universities. Every student will graduate with a career certification that prepares him for a good job. http://www.vertusschool.org/our-approach/

FOR MORE INFORMATION:

School URL: http://www.vertusschool.org/ Contact: Perry White, pwhite@vertusschool.org



BATTELLE EDUCATION METRO INSTITUTE OF TECHNOLOGY

PREPARING STUDENTS TO BE SUCCESSFUL FOR WHAT COMES NEXT

We found better ways to teach. Adaptive structures like blended learning, problem-based instruction, and digital assessments give teachers real-time data and give kids a real opportunity to connect—to their peers, to their local contexts, and to the world.

AIMEE KENNEDY, PRESIDENT, BATTELLE EDUCATION

KEY FEATURES:

- Vew School
- Flex and À La Carte Blended Model
- Competency-Based Learning
- Early College and Dual Enrollment
- Higher Education and Community Partnerships

AT A GLANCE:

Start Date: Fall 2015 Grades Served: 6-13 Location: Columbus, OH Operator: Battelle Education Operator Type: Nonprofit School Type: District Setting: Urban Students at Start: 200 Students at Capacity: 800

> "Grades don't motivate kids, real work does."

The Vision: The Metro Institute of Technology (MIT) is designed to solve two problems: (1) capable students may struggle in schools that assume everyone acquires the same knowledge, at the same rate, towards the same goals; and (2) the high cost of a college education prohibits many students from completing a degree.

By personalizing each student's learning journey, MIT prepares students with the knowledge, skills, and support necessary for postsecondary success. By offering college course credit as part of its curriculum at no cost to the student, MIT makes college more affordable.

The Academic Model: MIT raises the bar for high school completion beyond the diploma, beyond college readiness—to a college degree or certificate. As a result, the school focuses on outcomes that matter for college and work. Students are expected to develop mastery in three areas:

- 1. Content knowledge
- 2. Habits of success like planning, decision-making, and persistence
- 3. Stackable credits and credentials—the evidence of competencies required by the colleges and industries that students enter after high school. MIT aims for the following credentials for at least 80 percent of its students who start in grade 9:
 - Pass 2-year college entrance assessments within 2 years, certifying exemption from remediation
 - Earn transferable college credit within 3 years

- Earn an industry-recognized certificate within 4 years, or
- Earn an associate's degree within 5 years

To meet these goals, MIT employs a student-centered, mastery-based curriculum through blended learning and strong college connections.

Self-paced, Mastery-based Learning: Time is a variable not a constant at MIT. The school uses Ohio's credit flexibility to allow students to move through required coursework at their own pace, studying the content they need when they need it. Students must demonstrate mastery of each learning target in each class before they move on to the next target.

Blended Learning: MIT classrooms are vibrant, agile ecologies of learning. Teachers design lessons around problems that students care about to develop their higher order thinking skills. They create opportunities for students to learn online in both synchronous and asynchronous opportunities. Students also engage in experiential learning through field studies, internships, externships, work-based learning, and research projects and attend day-long intercessions for remediation and enrichment.

Early College: MIT's founders believe that students in a flexible, supportive environment can earn twice as many credits as they could in a traditional school. That time saved is then applied to college coursework. Most students begin taking college courses in 11th grade, often online through partner Franklin University's blended learning platform. The



college coursework leads to a broad range of certificates, credentials, badges, and associate's degrees.

In the final year (13th grade), students spend time on college coursework and/or a year-long internship or apprenticeship related to their career interest while acquiring industry-recognized certifications. The 13th year is fully funded with public dollars through existing state policy regarding graduation requirements, post-secondary options, and college credit plus opportunities.

The Organizational Model: MIT is a partnership of Battelle Education, Franklin University, and Metro Early College High School. MIT extends Metro's personalized, mastery-based



Algebra I, Algebra II, Pre-Calculus

The school is located on the Franklin University campus. Students do not pay for the college credit they earn from Franklin University; it is paid instead through MIT's budget. In fact, a specific goal for launching MIT is to demonstrate that more can be achieved—that is, a high school diploma and a college degree—for the same cost as a typical high school diploma

The Operator: Battelle Education is a nonprofit organization dedicated to the field of education and innova-

BY THE NUMBERS:

Year 1 public revenue per pupil: \$7,465

Year 1 expenses per pupil: \$11,319 Year 4 revenue per pupil: \$7,088 Year 4 expenses per pupil: \$6,576 Years to sustainability: 2

tion. After successfully opening Metro Early College High School, Battelle Education launched the Ohio STEM Learning Network and subsequently established STEMx, a coalition of 20 member states dedicated to the support, advocacy, and implementation of high-quality STEM programs.

Battelle Education intends to utilize the STEMx coalition and the Ohio network to "franchise" the MIT replication model, with Metro Early College High School serving as a home laboratory. They are further developing Metro into an incubator for new schools, with staff who provide professional development and training.

INTEGRATION OF COLLEGE COURSEWORK AND CAREER EXPLORATION



As students learn and develop their readiness for college and career, they spend less and less time in the classroom. That time is replaced mostly by career exploration such as day-long field experiences, in the early years, and by college courses and internships in the later years.

FOR MORE INFORMATION:

School URL: http://www.osln.org/schools/metro-institute-of-technology/

Operator URL: http://battelle.org/our-work/stem-education/BattelleEd | Contact: Aimee Kennedy, kennedya@battelle.org

