

LIGHTING THE PATH TO PERSONALIZED LEARNING:

Inspiring Stories from Next Gen Schools

Produced by Getting Smart in partnership with

Next Generation Learning Challenges

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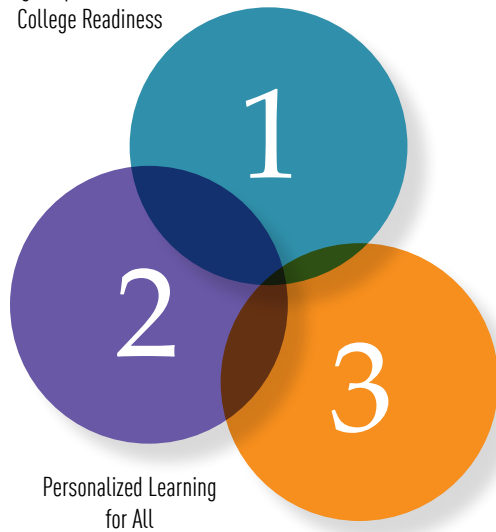
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BACKGROUND

High Expectations for
College Readiness



Personalized Learning
for All

Optimized
for Scale

New tools—along with a recognized need for redesigned learning experiences —have created the opportunity for a new generation of schools that work better for students and teachers. Next generation learning is blended, personalized and competency-based.¹ Next gen environments combine the best of face-to-face and online instruction in a student-centered environment. Progress is based on demonstrated mastery.

The Getting Smart team spent the last year exploring next gen schools. With support from Next Generation Learning Challenges (NGLC), Tom, Caroline, Carri and Megan set off to learn more about the forward-leaning leaders who are building and inspiring new models of teaching and learning. We visited schools from coast to coast. We tracked coverage in the media and by other organizations. We hosted monthly planning calls and had regular email check-ins. We asked questions. We took notes. We invited people to be honest. We cheered on successes. We offered advice on challenges. But mostly, we learned.

This report tells the story of the leaders and their teams as they attempt to tap into the promise of personalized, next gen learning. These schools are NGLC breakthrough schools because of their adherence to three [Personalized Learning School Design Attributes](#) adopted by NGLC that educational innovators have deemed as the “sweet spot” for reimagining public education—high expectations for college readiness, personalized learning for all students and a school model optimized for scale. The magic happens at the intersection of these attributes, when schools put personalized, blended learning models into place—so that students can strive to meet high expectations and demonstrate mastery of competencies necessary to graduate college- and career-ready—while keeping an eye toward financial sustainability and ability to scale.

New learning environments hold the promise of dramatically improving college and career preparation. Ideas are plentiful, but it is the testing of those ideas and sharing of key lessons that offer the best potential for new school models to thrive. The purpose of studying the progress of this sample of schools is to bring to light their lessons and inspire

“Next generation learning means students advance along personalized learning pathways in collaborative and responsive environments.”

others to take the path less traveled. These schools and their leaders have had a multitude of “aha” moments to

get where they are, and we hope that by sharing their stories, readers will have their own moments of clarity and inspiration.

This study included 14 NGLC grant recipients that shared the desire to reimagine the learner experience and iterate structures, strategies and tools to improve outcomes dramatically. Grantees not only had to present an innovative school design, they had to illustrate the possibility of scaling their impact without relying exclusively on grants.

NGLC and the schools it supports through the grant process are “breakthrough” models because of their ability to move away from traditional paradigms and innovate for success. The schools differ greatly in form, but all function with personalized learning as a central unifying theme. The ability to create a “breakthrough” model relates directly to a school’s

change in student learning experiences. Simply put, these schools are “game changers” designed to pave a new way forward for excellent education.

When attempting innovation, anything can happen. Some leaders have opened inspiring schools successfully, while others failed to gain support of their district or authorizer and have made the difficult decision not to pursue opening a new school.

The schools profiled in this paper are attempting pedagogical and organizational innovations designed to produce dramatically better results for students, better working conditions and extended impact opportunities for educators, and models that are sustainable and scalable. Between the funders, supporters and staff of NGLC, as well among grant recipients, there is a shared sense that this innovation agenda holds the promise of significantly improving student outcomes and shifting the course of school reform, nationally.

capacity to improve the nature of student outcomes dramatically and fundamentally alter the degree of



LEARNING FROM THE LEADERS

We invited the leaders we profiled to share the lessons they’ve learned to help light the path for others. We asked, *“if you could speak to a future NGLC grantee, what is the one thing that you would tell them about your experience or the most important lesson that you learned through the process of transforming education for kids?”*

Look for their advice throughout this paper with this icon.

NGLC SCHOOLS WE PROFILED

THE SCHOOLS PROFILED in this paper represent a cross-section of charter, district, new and turnaround recipients in various stages of planning or operating a school. Each received funds to assist their design and launch (or re-launch) through open, national competitions organized by Next Generation Learning Challenges, with funds provided by the Bill & Melinda Gates Foundation. Together, these schools and their backers represent, in our view, one of the nation's most promising catalysts for positive educational change. This paper is a journey through what some of the models currently look like and how they interact with the forward-looking Personalized Learning School Design Attributes. Each of the grantees mentioned, regardless of where they are in the process of launching a school, have working and practical examples of how modern education is being defined that can serve as both inspiration and potential best practices.

More information about NGLC support for K-12 breakthrough models and a full list of grant recipients is available here: <http://nextgenlearning.org/funding-framework>.



CHARTER

[Cornerstone Charter Schools](#)
[Cornerstone Health + Technology High School](#) ●
 Detroit, MI
 Charter, New
 Early Implementation

[Ingenuity Prep](#)
 Washington DC
 Charter, PK-3
 Early Implementation

[InnovateEDU INC](#)
[Brooklyn Lab Charter](#) ●
 Brooklyn, New York
 Charter
 Launch

[Montessori for All](#)
[Magnolia Montessori for All](#) ●
 Austin, TX
 Charter, New
 Launch

[Out of the Box Learning Studio](#)
 Seattle, WA
 Charter
 Planning

[Summit Public Schools](#)
[Summit Denali](#) ●
 Sunnyvale, CA
 Charter
 Early Implementation

[Ednovate](#)
[USC Hybrid High School](#) ●
 Los Angeles, CA
 Charter, New
 Early Implementation



DISTRICT

[Danville Independent Schools](#)
[Bate Middle School](#) ●
 Danville, KY
 District, Complete Redesign
 Early Implementation

[The Education Achievement Authority of Michigan \(EAA\)](#)
[Nolan K - 8](#) ●
 Detroit, MI
 District, Turnaround
 Early Implementation

[Florida Virtual School](#)
[FLVS Flex Academy](#) ●
 Winterhaven, FL
 District, New
 Launch

[Horry County Schools](#)
[Whittemore Park Middle School](#) ●
 Conway, SC
 District, Turnaround
 Early Implementation

[Lakewood City Schools](#)
[MakerSpace at Lakewood City Schools](#)
 Lakewood, OH
 District, Redesign
 Planning

[Lebanon School District](#)
[Lebanon High School](#) ●
 Lebanon, PA
 District, Redesign
 Early Implementation

[Piedmont City Schools](#)
[Piedmont Middle School](#) ●
 Piedmont, AL
 District, Redesign
 Launch



Click on colored Attribute circle to read about this school's personalized learning design story.

KEY

- High Expectations for College Readiness
- Personalized Learning for All Students
- Optimized for Scale

PERSONALIZED LEARNING SCHOOL DESIGN ATTRIBUTES

Our stories represent “moment in time” snapshots of where these schools were in their development as we checked in with them throughout the 2013-2014 school year and as their new schools opened their doors that fall. All quotes were obtained in our interviews and site visits unless otherwise noted. The key findings from our conversations are organized using the three Personalized Learning School Design Attributes, with school stories told as examples of each attribute in action.

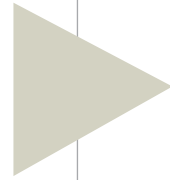
The schools profiled display particular aspects of these attributes. The scope of their individual power and potential create the necessary threshold for innovative schools to push forward into uncharted public education terrain. The lessons and observations offered point out the challenges of developing innovative new schools while lighting the path forward for all districts and school networks.

While the stories featured here exhibit diverse approaches to the attributes, they share a commitment to turn problems and constraints into opportunities—an important mindset for any successful entrepreneur. There is a wide array of pathways and relevant models available to schools to create students ready for college.

NGLC grant recipients are looking for ways to bridge the gaps in their local contexts, through comprehensive school-college partnerships, early college opportunities, reforms in developmental education, and alignment and co-delivery of academic programs.

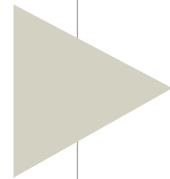
PERSONALIZED LEARNING SCHOOL DESIGN ATTRIBUTES

ATTRIBUTES



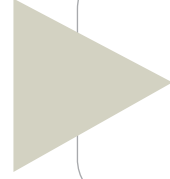
High Expectations for College Readiness

- Learning Growth
- College Readiness



Personalized Learning for All Students

- Learner Profiles
- Personal Learning Paths
- Competency-based Progression
- Flexible Learning Environment



Optimized for Scale

- Financial Sustainability
- Scalable

1



HIGH EXPECTATIONS FOR COLLEGE READINESS

ATTRIBUTE

1

CLOSE YOUR EYES AND IMAGINE

an innovative school, a next generation school that strives to prepare students to thrive in college and career. Picture a school that engages students in rigorous and authentic Project-Based Learning opportunities, a school that has developed ways to get technology into the hands of students in a way that connects to its goals around next gen teaching and learning. You're probably imagining a flashy high-tech building situated in well-resourced district with dollars to spare. You may not be picturing a traditional school district in the middle of Kentucky. You may not be picturing a building that was built in 1912. You may not be picturing [Bate Middle School](#) in Danville; but you should be.

SCHOOLS FEATURED

- **Danville School District**
- **Piedmont Middle School**
- **Magnolia Montessori for All**
- **USC Hybrid High**
- **Nolan Elementary-Middle School**

Adults believe in the enormous potential of all students and support them in achieving at the highest levels, with a focus on:

- ▶ *Learning growth:* meeting students at their zones of proximal development and supporting their learning from that point. As a result, students master academic content and skills at accelerated rates. This includes, but is not limited to, learning growth of at least 1.5 years of growth annually in math and ELA. NGLC grant-ees are also required to define, support, and measure growth in other college and career success standards they deem important (e.g., critical thinking, complex communication skills, collaboration, and student self-efficacy).
- ▶ *College readiness:* at least 80% of students will meet or exceed college readiness benchmarks by age 18.

ASSESSING READINESS.

The accelerated growth expected in the breakthrough schools is only possible with student-driven learning. Currently, NGLC uses Northwest Evaluation Association (NWEA) map assessments as a benchmark to measure this growth since these data are both relevant and indicative of true academic college readiness³. NGLC identifies a score of 21 or greater on the ACT as an indicator of college readiness—in the absence, for now, of accepted indicators that measure 21st-century skills. Grantees have also been asked to demonstrate plans to graduate 90 percent of middle school students and 90 percent of high school students, as well as move 80 percent of students to postsecondary education. NGLC made these shifts in assessment standards to acknowledge that college readiness is much more complex than how it is currently measured.

OVERVIEW

Despite more than a decade of advocacy for 21st-century college skills and better preparation for college readiness, most states continue to focus solely on the 3R's (Reading, Writing, and Arithmetic), and most secondary schools still lack the structures, tools and culture that students need in order to be college-ready.² However, when students understand why they are learning, what thought patterns help them learn, and how learning helps them achieve preferred future goals, they will be more successful in completing school.

It can be challenging for individual students to navigate the path from high school to college successfully because of the institutional and systems-level gaps in America's educational ecosystem. NGLC identifies four key trends current students face that are increasing the importance of college readiness. First, career entry and transition are increasingly convoluted and complex. Second, persistent unemployment has many calling the current economy a "jobless recovery" on the tail of the 2007 recession. Third, postsecondary education is increasingly diverse and laced with financial barriers that prohibit transparency and access. Fourth, organizations are public education.

Improving outcomes significantly requires a fundamental redesign of the educational process. Improved outcomes in the previous decade were largely a result of optimizing the existing model of education. But leading networks and high-performing districts have concluded that further significant improvement in outcomes will require a fundamental redesign of the educational process.

Excellent teachers lead to excellent student outcomes, yet only about 25 percent of current classroom teachers meet the threshold of 1.5 years of academic growth per school year.⁴ Getting, keeping and training the staff at a next gen school is fundamental to maintaining high expectations and keeping the school focused around its desired outcomes. The NGLC grant recipients share the desire to offer increased professional development and quality in the teaching staff that interacts with students.

Combining experimental organizational design with technology integration is challenging in any sector but particularly so in education given strong constraints and an imperfect tool set. There are few early templates of how to organize next gen environments; there is little agreement on how students should demonstrate mastery. But, there is growing consensus around a vision of high engagement and personalized learning.

ATTRIBUTES IN ACTION

The schools we interviewed see blended environments as key to personalizing learning and to increasing learning growth. While the blended models vary, they all lean toward what the [Clayton Christensen Institute](#) calls “disruptive blended-learning models,” including Individual Rotation, Flex and A La Carte models.⁵

Personalization extends to how, what and when a student is able to learn. It is reflected in the definition of blended learning—flexible and personal—and fundamental to how schools are breaking through traditional pedagogical paradigms into new realms of college readiness.

As the schools illustrate, the connection between students’ customized education and the *ownership* of their learning is where bets are being placed to carry 21st-century learners forward.

The five schools featured in this section help all students achieve college readiness by meeting students where they are and believing in their enormous potential. They are magnifying learning growth by using blended learning as a key strategy to personalize instruction and thereby promote

personal growth along each learner’s unique pathway. They are teaching the whole child, helping students to imagine their future while giving them the academic tools to succeed in college and become change agents in their own lives and communities.

Piedmont is evolving its model and adding new components over time. Newly opened Magnolia Montessori is off and running with a data-infused blended learning model that taps into students’ passions. USC Hybrid High is entering a third year, keeping its sights on learning growth as it made much-needed shifts in its organizational model after significant struggles in the first year. Danville’s story highlights the powerful student work that is achieved when high expectations are set. And the Education Achievement Authority of Michigan continues to push the boundaries on how platform design can better support personalization.

ATTRIBUTE IN ACTION: DANVILLE SCHOOL DISTRICT

Danville Independent Schools | Bate Middle School | Danville, KY

District, Complete Redesign | Early Implementation | School Opening Fall 2013

Website: <http://www.danvilleschools.net/>

Twitter: @BATEMiddle @DanvilleSchools

Facebook: <https://www.facebook.com/pages/Bate-MiddleSchool/120959220254>

The personalization and readiness revolution continues in the [Danville School District](#), serving a small town an hour south of Lexington, Kentucky. The district is a grant recipient using NGLC funding to innovate and continue to personalize learning geared toward college readiness at the [Danville High School](#) and [Bate Middle School](#). Carmen Coleman, former Danville Superintendent, says the incoming money helps to accelerate the district's innovation plans drastically. As she puts it:

The model of schooling we have now was designed to meet the needs of the Industrial Age. Today we live in the Information Age, a time when creativity, entrepreneurial thinking and customization are key components. Some have called this the age of 'extra,' suggesting that to be successful, you must bring something extra to your work. Know-

ing this, we have been working to design a learning experience for our students that will allow them to do just that—bring something extra to their work, something that will allow them as many opportunities as possible. Being an NGLC grantee provides a tremendous boost for our plans and ultimately, for our students.⁶

Coleman facilitated district goals starting with “powerful learning experiences” that are “meaningful, engaging, and relevant, connecting to students’ interests and/or previous knowledge.”⁷ Tom was impressed with the detailed feedback that Coleman provided to Getting Smart staff members.⁸ Kentucky was an early adopter of the Common

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LEARNING FROM THE LEADERS

“To create a system of learning that challenges institutionalized norms, there is value in a ‘ready-fire-aim’ approach. Sometimes you have to get into it to be able to re-calibrate one’s own lenses on learning. When teachers are thrust into that uncertainty—even if going willingly—leadership must provide structures and systems that reduce anxiety around taking risks. This often manifests in processes of formative analysis, a keen eye focused on what students actually are learning and doing (and not what we are teaching), and the framing of failure as a key learning moment.”

— Keith Look, New Danville
Superintendent

Core State Standards (CCSS), and the two schools in the Danville District are quickly moving away from traditional standardized testing toward performance-based testing. Called Performance-Based Assessments, or PBATs, the tests are multidisciplinary assessments designed to assess CCSS, ACT skill sets and 21st-century skills. Engaging the students in performance-based assessments that are aligned to higher and deeper standards is just one way in which Danville focuses on high expectations for college readiness. Former Bate Middle School Principal Amy Galloway explains:

PBATs push innovation by mandating that students learn to work as team members, to transfer content and apply it with 21st-century skills, to give and receive feedback, as well as keeping every student on the hook. PBATs also allow for scaffolding according to student needs, so that your special education students as well as your most advanced students can show you what they can actually do beyond your standard expectations—with pride versus only showing you what they don’t know on a standard assessment. Additionally, the implementation of PBATs has pushed our students beyond where they have ever reached before, and the high school better be ready for a whole new level of 21st-century Achievers coming to them next year!

During a recent visit to serve as a judge for the eighth grade PBATs at Bate Middle School, Carri was most impressed by the overall culture and climate in Danville. She explained:

Everyone—from the students, to the teachers, to the building-level and district-level administration—just seems to ‘get it’ and be on the same page as the school moves forward. They are taking risks, celebrating successes and constantly reiterating to improve. It’s a ‘fail fast and move forward’ district. The leadership in the school and surrounding district has figured out that empowering teachers ultimately empowers students, and it’s a special place with a leaky roof that looks outdated on the surface but doesn’t make any excuses. In short, it’s proof that it doesn’t take a shiny new ‘teched-out’ building to innovate. All it takes is a solid plan built around a strong student-centered foundation and the support to make it happen.⁹

Students of Danville High School receive a special diploma called the “Danville Diploma”—an achievement that shows mastery in college and career readiness:

THE “DANVILLE DIPLOMA”

- Intentional experiences to equip students with skills to persevere when faced with challenges; value and exercise creativity; discover how critical thinking skills are used across disciplines; become a functioning member of a team; exercise effective communication and presentation skills; understand the importance of taking initiative; learn about various aspects of leadership and develop those skills; adapt and problem-solve; manage time and create a plan for accomplishing a task or goal; know how to find reliable and accurate information; and analyze, synthesize and make inferences from data
- A requirement to demonstrate readiness to move to the next level at specific transition points (grades 5, 8 and 11) by demonstrating growth and development as a learner and a productive, contributing member of the school and larger community
- Meaningful, in-depth experiences for students with service learning and career interest opportunities, as well as ongoing opportunities to experience and explore both visual and performing arts
- Opportunities each year for students to plan for successful pathways for both college and career, starting no later than fifth grade, with the purpose of being exposed to as many options as possible
- A requirement to take either an Advanced Placement (AP) or college-level course and the opportunity to earn career certification
- Opportunities for students, beginning in kindergarten, to become conversant in one language other than English or their native language, with the chance to explore others
- Learning through meaningful projects and taking part in meaningful processes to develop deeper understandings
- Opportunities to become financially literate, both on a personal level and within the larger economy
- An understanding of using social media responsibly including possible consequences when appropriate judgment is not utilized; and
- Development of what it means to be a responsible citizen, and a deep sense of connection to the Danville community.

Danville's new superintendent, Keith Look, strongly believes in the fire that the community of Danville has sparked, and he is excited to support and expand the culture that has been created. He kicked off the back-to-school season with the reflective process that makes Danville such a special place. "The first day of school is the most immediate measure of progress made from the year prior. Tweaks, adjustments and re-inventions of systems go into operation. Investments in professional development begin their rewards. Energies and attitudes ensure that all students begin the year with all A's!"

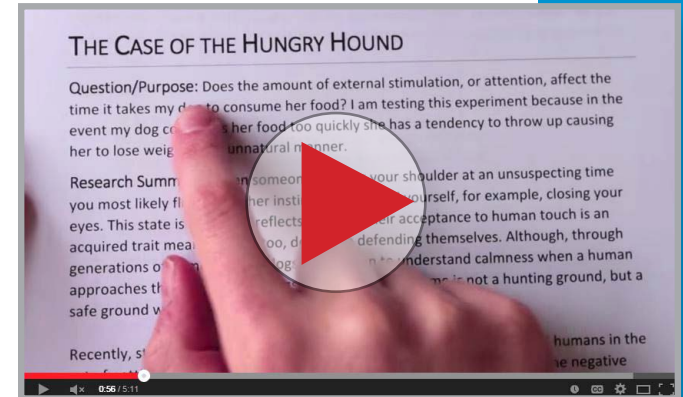
Kentucky students have benefited from years of thoughtful leadership that have led to this moment of transition. After former Kentucky state education chief Gene Wilhoit took over the [Council of Chief State School Officers](#) (CCSSO), he created a national network of districts called the Partnership for Next Generation Learning. Danville was one of six Kentucky districts to join. Wilhoit said about innovations in Danville, "We are interested in supporting this kind of program at the national level."¹⁰ Good schools start with good goals, and those of the Danville Schools have led the rural district into the national spotlight for college readiness.

In 2009, the district connected with the nonprofit [Buck Institute for Education](#), a leading authority on Project-Based Learning (PBL) and in 2010, the district sent a team of teachers and administrators to [High Tech High](#), a national leader for PBL. A PBL class combining freshman science and language arts started

in 2010 with high-stakes student "Presentations of Learning" commencing in 2011. A team visited three leading schools in New York City, including the [School of One](#), and Bate Middle School and Danville High School participated in the [Project Lead the Way \(PLTW\)](#) initiative. The reform-based mentality led them into the breakthrough world of NGLC where they were among like-minded peers. Over the last three years, Danville has become one of the most improved districts in Kentucky in college and career readiness. Being in the family of NGLC schools, they continue to innovate and grow to better prepare students for a constantly evolving world.

The decision to enact change in the district came largely from the middle school being put on the radar as a top priority in the district. The negative perception of the school may have been stronger than the reality, but it definitely needed solid direction. The school had looked the same for well over 100 years, and district leaders knew that a change was needed to make this experience one that prepared students for today's world. Today, the high-engagement environment at Bate Middle School prepares students for a bright future.

Bate Middle School Case of the Hungry Hound: Student Project Example (Experiment)



<http://www.youtube.com/watch?v=Mzi6V54YvY8>

ATTRIBUTE IN ACTION: PIEDMONT MIDDLE SCHOOL


Piedmont Middle School | Piedmont City Schools | Piedmont, AL
District, Complete Redesign | Launch | School Opening Fall 2014

Website: <http://www.piedmontmiddle.org/>

Twitter: @PCSDK12

Facebook: <https://www.facebook.com/piedmont.middle>

Google+: <https://plus.google.com/u/0/101681898964508008773/videos>



The staff of [Piedmont Middle School](#) in rural Alabama used their NGLC grant to rethink the use of time to improve student preparation. The 1,200-student [Piedmont City Schools](#), a member of the [League of Innovative Schools](#), is not new to technology in the classroom. Led by Superintendent Matt Akin, district leaders are using blended learning to move to a more personalized and competency-based environment that will better prepare their students for college. “We have already built the foundation; we are ready to take it to the next level with the support of the NGLC planning grant,” said Akin.

With 70 percent of their students qualifying for free and reduced lunch, leaders at Piedmont Middle School knew that in order to increase learning they would have to increase student access to technology and the Internet. Four years ago, the district started a 1:1 program for all three district schools, using MacBooks. But, without Internet access outside of school, the 1:1 program would not truly reach its full potential. Piedmont decided to use an E-rate grant to provide a unique solution. They hired the vendors necessary to build a wireless network for the entire city of 5,000 residents. Because students are very transient throughout the city—sometimes at home, sometimes at their grandparents’ homes, with a neighbor, at the library, etc., this solution was a real

game changer for the entire community. The solution proved to be so valuable that the city has continued to support the idea, even after the initial grant money was phased out.

For Piedmont City Schools, the goal to magnify learning went beyond simply raising test scores and to a need to give their kids a chance for better work and career prospects in a city has been losing businesses and work opportunities. Now more than ever, they feel there is and must be a desire to reimagine the future of their students—including getting them ready for the next generation of college and career readiness. Piedmont schools have been blended for four years, but leaders realize it's an evolutionary process.

With the NGLC planning grant, and subsequent launch grant, the decision was made to start in the middle school as they work towards their competency-based model. There, teachers are running pilots and taking pieces of their success and pushing them up to the high school or down to the elementary school. The grant allows a closer look at rotation models, especially inside the classroom, and block time, where, for example, seventh and eighth graders work together while the teachers give specific and

individualized support as needed. Robotics has also been added to the schedule, giving students access to skills that will help them thrive in this 21st-century workforce. To further help students envision career opportunities and develop key workforce skills, health science and computer programming will be added next year.

These changes are all designed to move students toward greater learning than that offered by traditional curriculum and teaching methods, with a desire that accelerated growth will result in viable career options for students as well as the return of many of them to the community post college.

DIGITAL PROMISE PIEDMONT



Link to video here: <http://vimeo.com/97934448>

Related article here: <http://www.digitalpromise.org/blog/entry/a-model-for-21st-century-rural-education-at-piedmont-city-school-district>

ATTRIBUTE IN ACTION: MAGNOLIA MONTESSORI FOR ALL

Montessori For All | Magnolia Montessori For All | Austin, TX

Charter, New School | Launch | School Opening Fall 2014

Website: <http://magnolia.montessoriforall.org>

Twitter: @Montessori4All

Facebook: <https://www.facebook.com/montessoriforall>

Like many of the great schools we have visited, [Magnolia Montessori For All](#) was unassuming at first glance. Located in northeast Austin, Texas far away from South Congress and the well-known food trucks, a row of portable classrooms connected by decking and a small school sign on the front of the building welcome visitors. In the fall of 2013, Caroline sat in Sara Cotner's kitchen and couldn't help but get excited about this school as she talked about the plans and was honest about the challenges she knew they would face. Opening a school is hard work and includes many more operational, finance and facility struggles than most leaders anticipate. Cotner

wasn't naive, but she did have faith and determination that her team was well equipped to open a strong school just twelve months later. Her educated optimism made her the perfect founder and leader of this Montessori-based school.

Magnolia Montessori is a champion of both blended learning and the potential of a school dedicated to true college and career readiness for all its students. The school opened its doors as a public charter in the fall of 2014 with grades pre-K through 3. It will reach full capacity in 2019 with students through grade 8. Cotner witnessed the achievement gap firsthand in schools across the country while working as an AmeriCorps volunteer recruiting tutors for the public education system. Beyond basic benchmarks of state assessments and testing, Cotner discovered Montessori when she started "looking for a truly transformational approach to education that would not only



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LEARNING FROM THE LEADERS

“The greatest lesson we’ve learned so far is that when doing this work we should be as strategic as possible about what we decide to tackle all at once. Those of us in this movement tend to be dreamers and achievers, and so it’s tempting to take on everything all at once. We should be strategic about taking on the most significant key levers in the beginning.”

— *Sara Cotner and Team,*
Magnolia Montessori for All

help children get to college but would help them get through college and succeed in the ever-changing global economy—in addition to becoming agents of change in their families and communities.”¹¹

Magnolia Montessori sees four key problematic responses to NCLB that are teaching our children to jump through test-related hoops rather than keeping the focus on strong instruction, skill acquisition and life skill assessment:¹² canceling non-tested subjects, considering the tests to be the high bar instead of the bare minimum, focusing on test-specific skills rather than fundamentals, and over-administering benchmarks.

This school was formed in the face of these perceived restrictions and seeks to answer one fundamental question related to student growth and preparedness: “How can we adjust course, and create a system that favors individualized, data-driven, systematic instruction which is focused on educating the whole child?”¹³ Cotner sees three ways to answer this question that drives her educational passion—a passion that was clear to Caroline when she spent that afternoon in Cotner’s kitchen.

First, use data to systematically monitor progress and drive instruction: NCLB has helped to illuminate the very real gaps between different groups of students but has lagged in providing solutions to close those gaps. In order to do so, Montessori For All envisions monitoring each child’s progress and using the data they collect daily to determine crucial next steps for increasing student growth and progress. New tools integrated into blended learning have enabled teachers and administrators to capture and compare a greater range of data than was ever available in the past to help each child meet specific goals.

Second, combine data-guided acumen with innovative models of teaching to personalize student instruction. As Cotner points out, “Teaching everyone the same thing at the same time and in the same way leaves higher-performing children bored and lower-performing children frustrated and tuned out.”¹⁴

Most teachers’ colleges and educators are intimately familiar with Lev Vygotsky’s zone of proximal development and recognize that children working within this space make more efficient and effective progress. Compelling blended learning models are beginning to address the challenge of differentiating instruction and are significantly increasing how frequently students access their own zone of proximal

EDUCATING THE WHOLE CHILD.

Cotner's three part approach to creating a system that favors individualized, data driven, systematic instruction which is focused on educating the whole child:

- 1) Use data to systematically monitor student progress and drive instruction
- 2) Combine data-guided acumen with innovative models of teaching to personalize student instruction
- 3) Broaden what is measured in schools and what is taught

development—a key NGLC design component on the trajectory of college and career readiness. Combining blended learning with the Montessori model, another long-standing methodology that designs classroom interactions to address the needs of children with different interests and abilities, is a natural fit.

Third, broaden what is measured in schools and what is taught. Cotner believes that engaging students at the intersection of what is relevant and what they are passionate about while measuring true learning and growth is fundamentally necessary for the magnification of learning. While Cotner and Magnolia Montessori believe that Maria Montessori would be pro-EdTech if she were around today, they are not the only NGLC grantees to see the wisdom of increased student readiness and the role that technology might play.

Following in Montessori tradition, Magnolia is fostering an environment of high expectations and self-directed learning for all students. Throughout the year students will learn to direct their learning and plan field studies and field trips to complete their work. Weekend visits and trips with parents will help connect families to the students' learning. Classrooms feature several different centers for learning with multiple activities happening at each station. Some students will work independently, while others partner to complete a lesson or help a peer. Teachers

(known as guides) spend time in small group instruction and give students targeted and direct feedback. Learning is visual and tangible at Magnolia.

High expectations aren't just for students at Magnolia. Teachers attend Spanish lessons weekly to meet their bilingual requirements set by the school. Magnolia has an early release day every Friday to allow for two hours of professional development time. PD isn't just something they do to check it off the list. It's thoughtful and meets the needs of teachers and students. The team focuses on timely topics based on what is happening at the school. For example leading up to parent-teacher conferences, the team spent time discussing what should be included in parent conversations and how to best structure their time.

Magnolia started its school year three weeks before most schools in Austin. The decision to start early allows for two longer breaks during the school year, one in October and one in March. Cotner hopes that allowing for rest and rejuvenation throughout the year, as well as a few more professional development days for teachers, will contribute to job satisfaction.

The teachers' lounge features a treadmill and yoga classes are offered as well. It's clear the Magnolia team has been thoughtful when it comes to supporting their teachers.

As many school leaders know finding time and resources to successfully and adequately communicate and educate parents and guardians is a struggle. With an incredibly diverse family population at Magnolia, including multiple languages, finding ways to inform parents and keep them posted on school and student progress has been challenging.

To start the school year off, teachers did home visits with every student before the start of school. Teachers keep parents updated on their students through classroom pictures and one-on-one contact. With so many students coming from traditional public schools, there is also a need to educate parents about the differences in a Montessori education.

Cotner is confident that as the school year progresses they will find more ways to involve parents, including weekend field trips, committees and parent-teacher conferences.

It's the moments like two children from completely different backgrounds hopping out of their parents' cars in front of school and running to each other. They grab hands and smile and walk together to their classroom. "That's the start of world peace."

Cotner and her team admit opening a school has been challenging and exhausting but incredibly rewarding. There are days when they question if they are succeeding and whether it's all been worth it, but on those hard days magical moments happen. As Cotner recalled, it's the moments like two children from completely different backgrounds hopping out of their parents' cars in front of

school and running to each other. They grab hands and smile and walk together to their classroom. "That's the start of world peace," Cotner said.

The diversity at Magnolia is striking, but incredibly reflective of the community the school is based in. Cotner chose to build not only the school, but her home in this community. It was important to her to raise her children in the neighborhood and develop roots where her students lived.¹⁵



ATTRIBUTE IN ACTION: USC Hybrid High

Ednovate | USC Hybrid High School | Los Angeles, CA

Charter, New School | Early Implementation | School Opening Fall 2012

Website: <http://www.uschybridhigh.org/>

Twitter: @USCHybridHigh

Facebook: <https://www.facebook.com/USCHybridHighSchool>

You Tube: <http://youtube.com/user/USCHybridHigh>

On a mission to increase learning growth, [USC Hybrid High](#), a public charter school operated by [Ednovate](#) and located in Los Angeles, received a grant from NGLC to address low levels of student achievement. Their solution was a 21st century college preparatory high school that combines a traditional “no-excuses” approach with a blended learning model that incorporates technology across the curriculum and school day.¹⁶ The school opened its doors in 2012 as a project of the [University of Southern California Rossier School of Education](#) with the mission to combat one very specific and troublesome statistic: nationwide, only eight percent of students from low-income communities graduate from college by age 24, and that number is even smaller in most areas of Southern California.¹⁷

One strength of USC Hybrid High is the intentionality it places around teacher autonomy—with high expectations around results. They have a school-wide student information and data management tool, but teachers are essentially the sole architects of their individual classrooms and have choice in which learning software to implement for their students. Teachers also choose how to implement blended learning. As Oliver Sicat, CEO and founder of Ednovate, explained in our conversation with him, “We are constantly seeing what works, sharing it week to week and getting better together. Everyone is finding tools that support our work, and together we find them ten times faster.”

USC Hybrid High students experience learning in a variety of ways, which includes online, self-paced modules and performance tasks. Students progress through varying levels of independent learning opportunities as they excel.

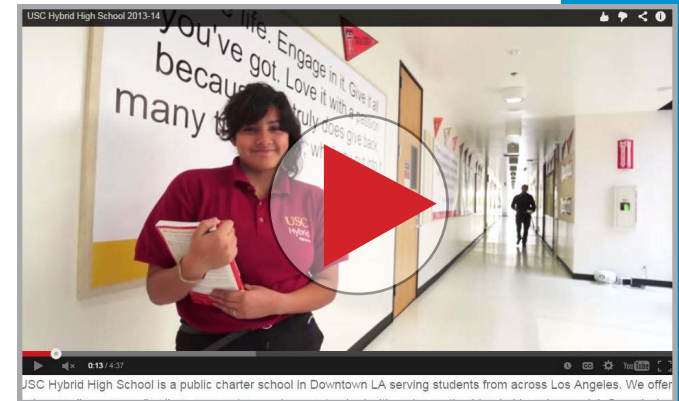
While school leaders see this as an evolving process that might take years to perfect, they are working toward using time more and more effectively.

In December of 2013, students' instructional time was approximately half traditional and half with students driving instruction. Daily personalized learning time alternated between subjects and allowed for greater flexibility and ownership as the year progressed. In the current school year, all courses are now a blend of online self-paced modules and group performance tasks, all of which are self-directed by students. USC Hybrid High strives for unparalleled growth, and self-directed learning and technology-enabled differentiation ultimately assist in that process.

For USC Hybrid High, the journey toward personalized learning has not been without challenge. Early on, the school struggled with a solid implementation of technology by depending too much on the technology itself for student learning and by underestimating the need for

a strong school culture and school-wide systems and procedures. This first year resulted in teachers who felt disempowered and students who were losing ground in their learning. The school developers had sound learning science backing their model and everyone was working hard to implement it, but like all pioneering schools, the team at USC Hybrid High didn't have other schools to observe or emulate. The school identified several problems that needed to be addressed: there was an over-reliance on technology solutions; there was a need for clear behavior expectations for all learning environments; students were not provided enough structure to help them meet expectations for performance while setting their own pace; teachers had to supplement the online course content to increase student engagement and rigor; and there weren't enough boundaries around the flexible learning time. In that first year, they learned that although a key

USC Hybrid High School Video



<http://www.ednovate.org/video/>

Sicat's regularly shares his blended learning journey on the Blend My Learning Blog

ITERATING RAPIDLY

“With the third quarter of the school year wrapping up here at Ednovate—USC Hybrid High School, we have made great strides down the path of personalizing the learning experience for each of our students.

That said, the path hasn't always been clear; the truth is that we have taken many turns and U-turns, learning hard lessons along the way about what works in personalized learning. We've gotten excited about ideas that we ended up tossing out just a few days in, and we've been skeptical about things that we ultimately fell in love with.”

Excerpt taken from Sicat's contributions to the Blend My Learning Blog. Read more about how the USC team is “Iterating Rapidly” in his blog: Iterating Rapidly: How a flexible model turned USC Hybrid High into a high-performing school in 30 weeks.

BLEND MY LEARNING BLOG



<http://www.blendmylearning.com/2014/03/26/iterating-rapidly/>

to the next gen learning experience, a personalized learning atmosphere that puts students in the driver seat requires a thoughtful progression towards independence paired with clear school-wide expectations and technology systems.

What's intriguing about USC Hybrid High's story is that the school was able to diagnose the problems, focus on solutions, and make a significant pivot between the first and second year which has set USC Hybrid High on a new trajectory. The school established a new leadership team (which became Ednovate); provided greater autonomy for teachers coupled with greater access to immediate and actionable data, more support and professional development, and stronger accountability; implemented a scaffolded approach to self-pacing and held students accountable for meeting expectations; allowed for broader selections of online content, forms of instruction, and edtech tools; and emphasized a positive school culture grounded in high expectations for student performance.

In order to create this culture of high expectations, they quickly learned the importance of being able to adapt to the limitations of their policies, technology and space.

As Sicat notes:

Many tech solutions aren't quite as effective yet as some traditional methods, and our spaces aren't quite as flexible as they need to be to allow for effective experience design. For the team, a solution-driven approach is key to continue to improve the experience for their students. They have made a conscious effort to clearly define the problems that they are looking to solve, and identify strong reasons why, prior to making any decisions regarding instruction, design and culture. Now in their third year, you can see students that are learning how to name what they need to be self-motivated learners. It is still a process, but it is where we want to go.

They have developed a theory of change that has taken a central role in the school's identity. This includes helping students find and define a solid purpose, providing a highly personalized and mastery-based curriculum, and supporting the development of a college bound mindset—all with the intention to improve dramatically the current gap between low-income and high-income families and college graduation rates. In only a year, USC Hybrid High has doubled the number of students who are performing at or above grade level in ALL subject areas on the NWEA MAP assessments.¹⁸ The school's instructional model continues to shift and adjust as needed, as the team models an iterative approach to education that prioritizes defining and overcoming challenges.

They learned that although a key to the next gen learning experience, a personalized learning atmosphere that puts students in the driver seat requires a thoughtful progression towards independence paired with clear school-wide expectations and technology systems.

ATTRIBUTE IN ACTION: Nolan Elementary-Middle School

Education Achievement Authority | Nolan Elementary-Middle School | Detroit, MI District, Turnaround | Early Implementation | School Opening Fall 2012

Website: <http://icansoar.org/nolan/>

Twitter: @EAAofMichigan

Facebook: <https://www.facebook.com/EducationAchievementAuthority>



[Nolan Elementary-Middle School](#) is part of Michigan's turnaround district, the [Educational Achievement Authority \(EAA\)](#), an effort to boost student achievement in the lowest-performing schools in the state while simultaneously developing a new approach to educating 21st-century skills.¹⁹

When we heard that the EAA not only planned to operate schools but to develop a school model and learning platform, we were skeptical that the new agency would have the capacity to pull it off. But with a grant from Michigan Excellence in Education Foundation and in partnership with [Agilix](#), a team led by Mary Esselman developed a competency-based school model and learning platform called [Buzz](#). After four visits, we consider it some of the most important work being done in the country.

During his first visit to Nolan in April 2013, Tom was impressed by clear evidence of strong pedagogical vision, a powerful learning platform and great teaching in every classroom. The 15 schools the EAA took over were in horrible physical, cultural and academic shape. That April, however, he found them clean, bright, safe, and with a positive academic culture—a testament to heroic first-year efforts.

The EAA afforded the opportunity for schools to select staff, as Esselman puts it, with “an intentional vision of identifying adults who had a mindset toward innovation and believed in the promise of meeting students where they are to ensure they have all of the supports they need to be successful.” Angela Underwood, was selected as principal at Nolan. Once the staff was selected and had access to the building, the first challenge was rallying the local community to help clean up the school. Despite having been an operating school, Nolan was filled with broken furniture and equipment, trash, old textbooks and outdated technology. Thirty dumpsters of debris were removed.

LEARNING FROM THE LEADERS

“There is a dramatic shift in culture when a school shifts from a traditional model of instruction to a blended, student-centered model. As students are leveled by instructional readiness (with socially aged peers) for many it is the first time they have experienced success, and the climate and culture of the school radically changes as student engagement increases and students begin to accelerate back to grade level.”

— *Mary Esselman, Deputy Chancellor, Instructional Support & Educational Accountability, Education Authority of Michigan*

The Nolan Story



<http://resources.imaginelearning.com/public/preview/detroit-storyshort>

As teachers and community members tossed out the debris, the school worked to scrap its old culture with a dramatic shift from a traditional model of instruction to a blended, student-centered model with a high bar for student readiness. The K-8 students were grouped on 19 performance levels in ELA and math, allowing many students to experience academic success for the first time. The climate and culture of the school changed as students engaged, and discipline problems declined dramatically.

The core EAA innovation is a mastery-based, student-centered learning system. Instructional units are the building blocks of the system, and each unit includes approximately three standards-based learning

targets. For each unit, the Buzz learning platform—developed with Agilix—includes a variety of learning resources, application opportunities and assessments which can be coupled with focused small group instruction and applied projects. Students are required to bring forward three forms of evidence of their learning and Tom appreciated the level of student ownership he observed. The organization of students by instructional level instead of age lets them progress through mastery and incentivizes growth and competency rather than seat time. The Buzz platform provides a space for student collaboration and identifies students able to provide peer-to-peer support.

Nolan teachers spend a month in professional development prior to the start of school to learn, understand and personalize the school’s model—including how to create the learning environments, build the common language, plan for instruction (unit planning verses lesson planning), utilize technology, use data to drive student performance and to ensure that no students were left behind, and assess mastery. Thus, ownership is grown, starting with the teachers and then extending to the students, creating a culture of inclusion and self-designed greatness.

Some schools see the technology as so fundamentally interwoven into the fabric of the school that the creation of a platform is part of the school design itself.

THE NEXT GENERATION OF PLATFORMS

The worldwide learning management system market is expected to grow from about \$3 to \$8 billion over the next five years. Demand for better learner outcomes—particularly employability—and interest in customizing individual learning trajectories—particularly competency-based progressions—are two factors driving investment in learning platforms.²¹ As the NGLC schools have shown, the gap is a prime place to get creative. The Buzz platform in Michigan’s EAA, supported by Agilix, is a good early example of a K-12 platform supported by professional services. While third party independent options for platforms are increasing in quality and next generation alignment, some schools see the technology as so fundamentally interwoven into the fabric of the school that the creation of a platform is part of the school design itself.

Student Centered Learning



<https://www.youtube.com/watch?v=hTe4xgickR4&feature=youtu.be>

During our visits to Nolan, we found classrooms organized around EAA's pillars of student-centered learning:

- Students are grouped by readiness and progress via mastery, not by age or seat time;
- Students master rigorous content aligned to international and state standards at their own pace;
- Students assume ownership for their learning and are able to communicate their progress;
- Students acquire knowledge through the teacher, tech, peers and their own research; and
- Students, parents and teachers receive continuous feedback.²⁰

The first several weeks of the school year are devoted to creating the learning environment through relationship building, common language and shared vision creation, structural alignment, and the inclusion of common rituals and routines that create the foundation for accelerated readiness. Teachers have flexibility in how they organize the structures in their classroom as well as the rituals and routines they use to get to the goal of placing students at the center of the classroom experience. The rituals and routines allow the students to assume responsibility and free the teachers to work one-on-one, in small groups, and to intervene as needed for those students who need extra support or those who are

ready to accelerate. Classrooms are expected to have a unified vision that incorporates the voice of the students in terms of how the classroom will look, sound and feel, and all of the students and staff are expected to employ a common language. The school understands the importance of creating a safe place for students and a culture of high expectations, strong student voice and ownership.

The goal for Nolan students is two or more years of academic growth for each student in every subject each year. In the blended format, 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 young students a voice every step of the way, setting the trajectory for college readiness at a young age. This is definitely difficult work, and preparing students for their newfound independence can bring challenge. The development of a strong school culture where students support each other and staff scaffold responsibilities has been key to their success. 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, which ultimately leads to new criteria of college and career readiness.

The development of a strong school culture where students support each other and staff scaffold responsibilities has been key to their success.



2

PERSONALIZED LEARNING FOR ALL STUDENTS

ATTRIBUTE

2

AS THE BROOKLYN LABORATORY

Charter School scholars funnel out the front door at the end of a long day, it is easy to see that although challenged and sometimes emotionally exhausted, they feel comfortable and safe in the environment that surrounds them. At the heart of the school are relationships, a genuine concern for students' academic and emotional well-being. And as those energetic and emotional sixth graders hurry out to meet their parents and guardians, you can see the slight look of appreciation—a look that may be hidden or masked, but one that you know is there, and one that will become more and more obvious as they mature.

SCHOOLS FEATURED

- **Summit Denali**
- **Brooklyn Laboratory Charter School**
- **Florida Virtual School**

Learning experiences for all students are tailored to their individual developmental needs, skills and interests. Personalized learning will include the following supporting elements:

- ▶ *Learner profiles:* students' strengths and weaknesses, motivation and goals are visible to them and their teachers. Profiles are constantly refreshed.
- ▶ *Personal learning paths:* each student follows a path through content and skills in ways that work best for him or her. Though students' paths vary, the destination is the same—clear, high expectations.
- ▶ *Competency-based progression:* student learning is continually assessed against clearly defined expectations and goals. Each student advances as s/he demonstrates mastery.
- ▶ *Flexible Learning Environment:* Time, space, roles and instructional modes flex with the needs of students and teachers rather than being fixed variables.

EDUCATION PERSONALIZED.

According to the national education technology plan, “personalized learning is paced to student needs, tailored to learning preferences and customized to the specific interest of different learners.”²³ Personalized learning also includes daily engagement with powerful learning experiences, flexibility in path and pace, and the application of data to inform the individual learning trajectory of each student. When education is personalized, opportunities to learn meet students where they are, bearing in mind extant skills, knowledge and abilities, and are maximized through supported goal setting, and through a culture where high expectations are deliverable through clearly understood competency-based pathways.

OVERVIEW

Our journey revealed a variety of personalized learning strategies from school to school. But it is clear that the days of teachers manually differentiating instruction for 30 students in one classroom are rapidly closing as new tools and blended environments support individual learning progressions that suit individual developmental needs, skills and interests. The emerging opportunity to support individual student success with technology rests upon three foundations:

- Motivation—building sustained relationships with students, exploring areas of interest and related careers, addressing barriers to school attendance;
- Customization—helping students set short- and long-term goals, track progress, and experience success in class, job settings and community services; and
- Equalization—broadening exposure to college and career options, providing high-touch/high-tech decision support for postsecondary planning for all students.²²

As the school profiles show, success of next gen models often hinges on properly aligning platform and content choices with educational goals. As elementary and secondary education shifts from flat, paper-based content to dynamic digital, interactive and student-driven content, technology-based platforms must keep up. It’s still harder than it should be to create an effective sequence of learning experiences in K-12, postsecondary or organizational training. Large-scale underinvestment and lack of clarity in demand have led to a lag in the creation of learning management systems, leaving them at least five years behind the growing demand for engaging, learner-centered, competency-based experiences that result in college and career readiness.

All of these NGLC grant recipients recognize the need to innovate to places that traditional teaching and learning cannot reach at scale. What their schools represent is the evolution of learning to a place where the teacher guides the student in his or her own unburdened growth and expression. Rather than a classroom of students that the teacher blankets in pre-determined, one-size-fits-all curriculum and instruction, personalized learning in the next generation of schools involves putting the student in the driver’s seat.

ATTRIBUTES IN ACTION

The three schools highlighted in this section show a strong progression of developing a truly personalized experience for students. All believe in the NGLC pillars of personalized learning: learner profiles, personal learning paths, a competency-based progression and a flexible learning environment. (These pillars have evolved as the field better understands what personalized learning involves. NGLC describes how its grant recipients currently approach personalized learning and provides related resources on its [website](#).

Although approaches vary, they have redesigned learning spaces, developed personalized learning plans and utilized learner profiles to build strong relationships with their students, and they understand the importance of focusing on mastery rather grades.

Summit Public Schools continues to perfect a personalized learning plan model that truly redefines the learning experience for kids. They refuse to be satisfied with outcomes that fall short of their own very high expectations and have embodied a philosophy of iteration that is constantly developing and testing

hypotheses on short cycles. In its first active year, Brooklyn Laboratory Charter School has developed an education platform that will capture complete learner profiles and support an approach to school that balances joy and rigor. Florida Virtual School is working hard toward the August 2015 opening of its online, on-campus learning experience, FLVS Campus, by refining the flexible model that focuses on the student as an active part of his or her education.

A Working Definition

The screenshot shows the website for Next Generation Learning Challenges. The main content area is titled 'PERSONALIZED LEARNING' and includes the following text:

In an education model where students are truly at the center, learning is tailored to individual students' strengths, needs, and personal interests. Learning opportunities take into account existing knowledge, skills, and abilities, set high expectations, and push students in supportive ways to reach their personal goals.

In NGLC's K-12 work, the outcomes are high rates of growth as students work toward college readiness. Situated in digital learning environments, learning experiences are built upon learner profiles and personalized learning paths, and students move on when they demonstrate mastery. Schools must be financially sustainable and scalable to support these outcomes and academic and life goals. See the Personalized Learning School Design Attributes.

The definition of personalized learning is evolving and its difference from other Next Gen Topics—like next gen learning and blended learning—may continue to blur. Personalized learning can take place in digitally enhanced environments or not. NGLC proposes that next gen learning incorporates personalized learning and that seamless integration with technology is needed to implement it effectively, affordably, and at significant scale. For more explanation, read *Moving Towards Next Gen Learning* on our blog.

The concepts are similar in higher education. In personalized learning, no two educational experiences need to be the same but the college degree carries the same certification of what any student knows and can do. Personalized learning can involve credit for prior learning, customized pathways through a rigorously defined competency set, multiple options for developing and demonstrating competency, coaches and mentors who guide students as they craft their own educational experience, and outcomes that have meaning for each student—degree completion, workplace skill sets, and career advancement.

Below the text is a section titled 'RESOURCES ON PERSONALIZED LEARNING' with a list of items:

- Upcoming Event - Nov. 04, 2014
INACOL Blended and Online Learning Symposium
- RETHINK: Planning and Designing for K-12 Next Generation Learning

<http://nextgenlearning.org/topics/personalized-learning>

ATTRIBUTE IN ACTION: Summit Denali

Summit Public Schools | Summit Denali | Sunnyvale, CA

Charter | Early Implementation | School Opening Fall 2013

Website: <http://summitps.org/schools/school-locations/summit-denali>

Twitter: @SummitPS

Facebook: <https://www.facebook.com/SummitPS>

[Summit Public Schools](#) is a small network of innovative Bay Area secondary charter schools inventing new approaches to personalization by combining digital playlists and engaging projects. Its sixth school, [Summit Denali](#), received an NGLC launch grant and opened with 135 sixth graders in converted Silicon Valley office space in September 2013. Denali is the first middle school in the network; they plan to add one grade each year until it includes grades 6-12.

Tom visited a few days after Denali opened, and, compared to other teams new to school development, the school was functioning at a high level despite grade level, model and platform innovations. The highly capable Summit leadership team has developed the most sophisticated talent development and innovation deployment systems we've seen.

Summit has very high graduation and four-year college attendance rates. More than half of their grads have graduated, or are on track to graduate,

from college, but the Summit team continues to innovate to improve on college and career preparation that is student-centered for personalization.

The Summit Denali vision for a next gen learning environment includes five priorities:

- Empower students to self-direct learning;
- Provide opportunities for deeper skills development across curricula;
- Offer authentic, real-world experiences that allow students to explore passions and careers;
- Personalize a student's pathway through a competency-based progression; and
- Ensure meaningful opportunities for students to foster community and a sense of belonging.

They have clear goals and track outcomes in four categories: content knowledge, cognitive skills, habits of success, and real-life experiences. And they are working on simple data visualizations to aid



student-teacher-parent conversations. What brings this all together is the [Summit Personalized Learning Plan \(PLP\) tool](#), which has been built to be a dynamic tool that students, families and teachers are able to access at all times. Through the PLP, Summit students set learning and personal growth goals, track their progress on these goals and access all of the learning resources they need each day.

While these design elements are the same across all Summit schools, each school may implement them in slightly different ways depending on the needs and feedback of its students and teachers.

The core of the schedule is devoted to Deeper Learning projects—persuasive speeches, research papers, science labs, engineering activities and more—facilitated by teams of educators. Heterogeneous groups of students focus on CCSS skills and dispositions including problem solving, constructing arguments, reasoning abstractly and quantitatively, and critiquing the reasoning of others.

Summit students develop habits of success—self-awareness, self-management, social awareness, interpersonal skills, decision-making and responsible behaviors—through projects and many opportunities to engage and contribute to the school community. Students gain real-world experiences through a series of career preparation, college readiness and cultural appreciation expeditions supported by partnerships with Bay Area organizations.

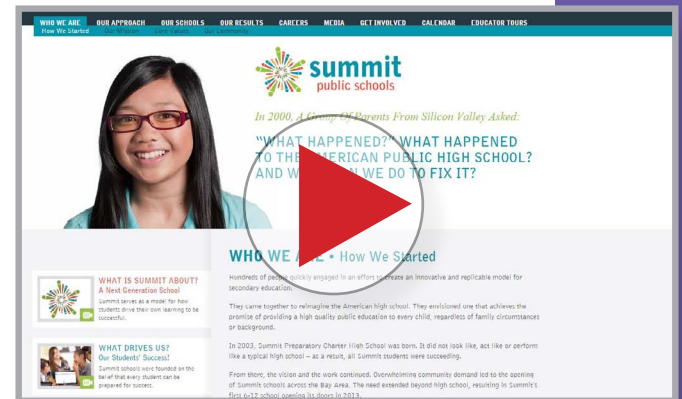
As Tom saw on his visit, every day, students at Summit Denali engage in personalized learning time, focused on learning content knowledge and featuring

a combination of playlists, learning resources, coaching and peer-to-peer tutoring. Each student works through content at his or her own pace on a personalized path driven by immediate, actionable feedback.

To manage this student-centered learning system, the Summit team worked with [Illuminate Education](#) to build [Activate Instruction](#), an online platform to house playlists. Summit founder Diane Tavenner and team have a clear vision of a competency-based system, and there's nothing on the market to manage the environment they're creating. As part of a project funded by the [Girard Foundation](#), Summit open-sourced Activate and all of the playlists they developed and plans to do the same for the PLP in the coming school year. Summit's ingrained, iterative approach is evident even in the development of the platform and their plans to share it. Tavenner labels their development philosophy "fail fast, iterate, fix it, keep moving."²⁵

Skill-building playlists are curated from the world of open content as well as what their own teachers develop, and their PLP tool tracks the growth trajectory of knowledge, skills and success

What Summit is All About



<http://summitps.org/whoweare/how-we-started>

The Summit Denali model is based on a dozen remarkable design elements:

THE SUMMIT DENALI MODEL

- 1 10 days of **onsite student orientation**
- 2 **Personalized learning plans** for every student
- 3 1-3 **student-led, mentor and family meetings** every year to focus on his or her personalized learning plan (plp)
- 4 100 hours per course of **project time** every year, facilitated by a teacher and focused on students' cognitive skills development
- 5 8 hours per week of **personalized learning time at school**, where students are focused on content knowledge
- 6 8 hours per week of **personalized learning time at home**
- 7 10 minute weekly, **student-led conferences** with his or her mentor focused on the student's plp
- 8 120 minutes of **reading** per week at school through Summit Reads and 120 minutes of **numeracy skill building** at school through Summit Solves
- 9 85 minutes per week of **community building**
- 10 8 weeks per year of **expedition experiences**
- 11 10 hours per year of **parent information/engagement** sessions and workshops
- 12 **Ongoing support** throughout the school year around the college application process

habits against college goals. Students are able to see how their daily actions affect their planned growth trajectory and receive coaching and mentorship to help them develop the skills necessary to drive their own learning and reach their goals. The system also translates coursework, skill development, and innovative experiences into credits and grades for application to traditional universities.

The innovative environment is an open learning space more akin to what you'd find at a start-up than a school. Students are able to access digital content and work individually, and there are also spaces for individual coaching and small-group work, as well as for larger group activities.²⁶ A powerful culture permeates everything, and the Summit team is constantly researching which habits of success are most beneficial—pushing persistence to and through college as a priority. They want students to “own their own learning, to be ready for college—that’s what kids are missing right now,” said Tavenner.²⁷

Last year, the “Summer of Summit” brought all Summit Public School teachers together for six weeks prior to the school year to create and curate their own blended learning curriculum. Teachers worked by using the same methods expected of their students and built the playlists for their students, finding different kinds of resources and connecting projects back to the CCSS. The personalization

for students starts with the creativity and passion of the teachers at Summit, and it extends deep into the school year when Summit students engage in expeditionary learning experiences for eight weeks while the subject area teachers engage in ongoing professional development. As Summit’s experience shows, the role of the teacher often shifts when the model with which they interact starts to become more student-centric.

The Summit cohort model has worked well, but they want to add more personalized and competency-based aspects. Denali students will have the social and cooperative aspects of working in teams and the benefits of customized skill-building playlists. Schools like Summit Denali are steering clear of traditional educational pathways where students interact with curriculum in flat, linear and one-dimensional ways with Project-Based Learning allowing for a deeper and more effective way to learn.

Engaging Student-Centered High School Model



<http://gettingsmart.com/2013/06/summit-denali-engaging-student-centered-high-school-model/>



ATTRIBUTE IN ACTION: Brooklyn Laboratory Charter School

InnovateEDU INC | Brooklyn Laboratory Charter School (LAB) | Brooklyn, NY
Charter, New | Launch | School Opening Fall 2014

Website: <http://www.designinnovationfactory.com/>

Twitter: @BklynLabSchool

Facebook: <https://www.facebook.com/brooklynlaboratoryschool>

Is it possible to create a high-engagement school where students do interesting and relevant work and meet high expectations? Erin Mote and Eric Tucker, co-founders of [Brooklyn Laboratory Charter School \(LAB\)](#), think the answer is decidedly yes. But over a January dinner with Tom, it was clear that there were a lot of details to work out on the joy-rigor paradox they imagined before 132 sixth graders showed up.²⁸

When you first walk into the nearly 108-year-old building in the heart of the [Brooklyn Tech Triangle](#), “traditional school” is the last thing that comes to

mind. The center of the action at LAB takes place in a great room that acts as the hub of a dynamic learning environment. Visiting two weeks after it opened in September 2014, Megan loved the flexible take on instructional time. One hour you may find students working in classroom-like settings in the corners of the room, the next hour you may find students working in small groups of three with movable whiteboards and tutors. Megan was convinced the flexible environment was extremely conducive to active learning. She observed, “Whether it is small clusters on the stairs, groups sitting comfortably on the floor or on the stage—there is no question about it, the flexible environments at LAB assure that learning is not confined to the traditional classroom.”



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LEARNING FROM THE LEADERS

“Looking back, one thing I wish I had done throughout the process was journal. Change happens quickly, and it would be nice to be able to look back and see the growth.”

— *Erin Mote, Co-Founder,
Brooklyn Laboratory
Charter School*

The LAB model personalizes learning with technology and tutors. It requires a staffing structure that allows small group instruction—no more than three students at a time. The LAB team includes six lead teachers and 24 Lab Tutor Corps Fellows, who are full time tutors, all with bachelor’s degrees, who work with students in small groups or 1:1. The fellows will have the opportunity to join a teacher residency program that provides LAB with a pipeline of quality educators as the school continues to

grow. Tucker attributes this idea to [Match Education](#) charter schools in Boston. After moving to a similar staffing structure, Match saw an increase in student success that LAB hopes to emulate.

In early conversations with our team, the co-founders mentioned that nothing available in the LMS marketplace matched the vision they had for their school. Talk of developing their own platform was balanced with questions around the reality of such a big undertaking—especially with all of the other things that are necessary to build a new school. Mote’s background as a technologist set a high bar, with her believing, “You have high expectations and see what is possible.”

Relationships are at the heart of LAB. From everyone we talked to on campus, we heard words of genuine concern for the well being of their ‘scholars,’ both academically and emotionally—a true combination of joy and rigor. In order to achieve the school’s commitment to this balanced education, LAB has moved forward with the development of an education platform that will help capture a picture of the whole child.

LAB founding members know the importance of the right numbers. The team was dedicated to serve a unique student population with a 1:1 program that allowed for personalization on every level.

LAB BY THE NUMBERS

132

The number of **sixth grade scholars** on site

132

The number of **Chromebooks** for students

33

The percentage of **students with special education needs**

85

The percentage of **students eligible for free and reduced lunch**

22,000

The number of New York City **doors knocked on during the recruitment process**

3,700

The number of **applications received** to fill the six lead teaching positions

26

The number of **enrichment courses available** to scholars (includes options such as Mandarin, step dance, boys' and girls' basketball, robotics and video game design)

1

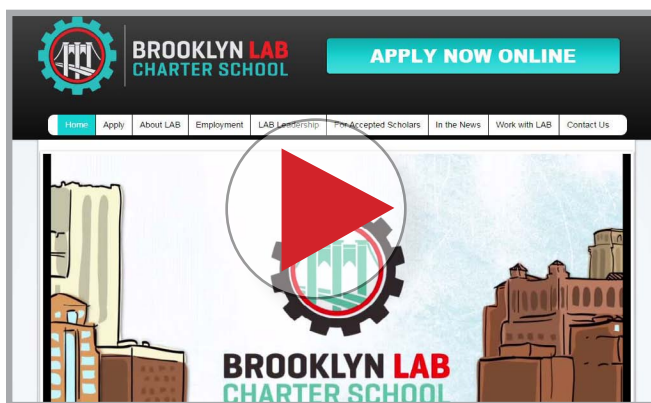
The number of **phone calls** that every scholar receives, every week

The platform is currently in its initial stages and the team continues to expand and improve so that it is able to act as a key to the development of personalized learning paths for the LAB scholars. The next focus of development will hold complete learner profiles that support teachers and fellows in making informed decisions about student needs. Through a development relationship with [ThoughtWorks](#), LAB is using the [Ed-Fi Alliance](#) data model to unify academic and operational data in an easy, sharable dashboard format for a holistic view of students.

The team opened the doors successfully with this platform and, with the help of fellow NGLC grantees who are testing the beta version, will continue to improve upon it in the months to come. NGLC schools can be a voice for teachers, students, and current and future innovative school leaders, and LAB believes in taking that role seriously. They view the network of next gen learning schools as having the ability to partner and work together, design when necessary, and iterate when probable. From this perspective, LAB insists the NGLC schools are poised to push the

EdTech market. The school's founders believe their twin goals of joy and rigor embodies the sense of entrepreneurial learning they hope to establish at the school; through their [Design Innovation Factory](#), Mote and Tucker have leveraged their combined experience in education and tech to create a school where, as they posit, "Technology is there to serve, inform and enhance teaching and learning processes."

Brooklyn Laboratory Charter School Video



<http://www.brooklynlaboratoryschool.org/>



ATTRIBUTE IN ACTION: Florida Virtual School

Florida Virtual School | Winterhaven, FL

District, New | Launch | School Opening 2015

Website: <http://flvs.net/Pages/default.aspx>

Twitter: @FLVS

[Florida Virtual School](#) (FLVS), a star in the world of online learning, received both a planning grant and subsequent launch grant from NGLC with the goal to open its first brick-and-mortar facility with a competency-based progression. The learning would move from FLVS's robust online platform to an in-person blended approach that is mastery-based, personalized and self-paced. "Any time, any place, any path, any pace" is the motto Florida Virtual School has followed since its founding in 1997, and with this new phase the statement epitomizes the flexible learning environment of a personalized learning school. Amy McGrath and her planning team at FLVS have chosen to work aggressively to launch the new FLVS blended school: FLVS Campus, in a redesigned space at FLVS corporate headquarters in the heart of Orlando.

The new school, FLVS Campus, has been in the works for quite a few years, influenced by strong research, teacher input and student experience. In 2011, FLVS helped Miami-Dade Schools develop the [iPrep](#) flex model high school. The following year, Miami-Dade opened eight more iPrep sites on existing high school campuses serving more than 800 students, as well as learning labs on middle and high school campuses to support part-time online learning.²⁹ On several visits with the FLVS leadership team, Tom was impressed with their focus on students, commitment to impact and their agility in pursuing innovation.

The power of going from a purely online school to an in-person blended model is that content will be available online at all times from any device in keeping with the FLVS mission. Within the FLVS Campus, students will work in grade level cohorts and will



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LEARNING FROM THE LEADERS

“The most important lesson that our team has learned is the power of a pencil. By writing our plans ‘in pencil,’ every decision, action and conversation was predicated upon the knowledge that we are flexible and open to the changes that would inevitably come. Our advice, then, would be to embrace the hard conversations that shift your plans; to allow for the smudges from your pencils, instead of designing in pen; and to take what comes and use it to make a more transformative experience for students.”

— Amy Mcgrath, *FLVS Campus Director*

Ironically, moving through the steps of this project in a vulnerably unburdened manner allowed the team members to distill the vision down to its non-negotiable tenets, which eventually became the foundation upon which the program is designed.

the opportunity to personalize the learning for each student. The content will be broken into learning objects and tagged by ability on the back end; students will create their own learning pathways according to the content they cover and their mastery level. The instructional designers have also developed a personalized dashboard that will allow students to log in and

know right where they are in their learning journey. FLVS capitalizes on the teacher following the students within the cohort model. The relationship-building component of teachers following the students for four years is a real strength.

After initial challenges with finding a location, the FLVS team decided that in order to have a successful rollout, they would benefit from holding off on their anticipated launch date of fall 2014. They requested and were granted an extension from NGLC. They will open their doors in the fall of 2015, taking the additional year to continue developing and preparing to implement their breakthrough blended model.

advance based on individual progress against competency measures. Students will work on devices in a BYOD environment, and FLVS will work with the local community in an effort to tap into their own resources to ensure all interested students have access to their own device. Teachers in the model will become students of the students: they will listen to their students and use their

interests to connect them to their community for mentorship opportunities and rich, interdisciplinary project-based learning. Students will be given the flexibility and resources to learn in an environment that works best for them and will progress in a competency-based model that measures and celebrates student growth.

Staff instructional designers have been developing strategies to merge FLVS curriculum into the new flex model. The introduction of face-to-face time for teachers and students in a physical school opens up

3



OPTIMIZED FOR SCALE

“FOR YEARS THE TEACHERS HAD

not been allowed to have a voice, but now that they have a voice, they redefine what the model will look like.” Statements like this from Beth Havens of Horry County Schools help demonstrate what can be accomplished through a shared leadership model. When the move to a personalized, blended environment was announced at Whittemore Park Middle School—a federally-designated turnaround school, not a single teacher chose to transfer out of the school as a result of motivation, inspiration and clear communication around the changes to come. The staff not only accepted but embraced the transformation ahead of them. They recognized the need to do something different than the way school was normally done. Teachers welcome the change in morale, and visitors continue to come to see what is happening and why there is such momentum at Whittemore Park. As Havens notes, “It is nice to be recognized for doing something good!”

SCHOOLS FEATURED

- Horry County Schools
- Cornerstone Charter Health and Technology High School
- Lebanon School District

The model is replicable and financially viable on public funding, which requires:

- ▶ *Financial sustainability:* the school can fund 100% of operating expenses on public per-pupil revenue within four years of launch.
- ▶ *Scalable:* the school model can be replicated at scale if it demonstrates impact.

A LOOK AT THE FINANCIAL REALITIES OF NEXT GEN ENVIRONMENTS.

A study from the University of Washington Center for Reinventing Public Education shows that as a result....

- Schools reverted to more traditional spending patterns, spending less on technology and more on personnel than planned: instead of spending a combined \$1.7 million on tech in the early stages as intended, they spent just \$650,000.
- Student-to-computer ratios were higher and schools spent less than planned on instructional and performance reporting software.
- Projected budget deficits in five of the schools threaten their ability to sustain on public funding, at least in the short term.

OVERVIEW

To achieve ultimate impact, NGLC believes school models must be replicable and financially viable on public funding, which requires the school to have 100 percent of its operating expenses funded on public per-pupil revenue within four years of launch and potentially scalable to create impact.

NGLC recognizes a situation where the current system suffers from a number of schools producing outstanding results for some of our most underserved students, but that those schools frequently exist as unique with no plans to grow beyond a single school. Often the cause of the scale problem is a dependence on “limited sources of capital, such as nonrecurring public grants and private philanthropy, to fund ongoing operations and growth.”³⁰ Additionally, success in many effective schools is proclaimed to be a result of luminary personalities and special human capital that are not easily replicated. It must also be noted that some leaders of successful schools do not have the inclination, knowledge or resources to take a successful model to multiple locations. Taken together, the challenges of scale are real and important considerations for NGLC schools to brave in the creation of breakthrough schools.

One of the key goals of the next gen schools is to establish that blended, personalized, mastery-based approaches that leverage technology to significantly increase student success can be produced at equal or lower costs than current norms. Results from the first year of a study by the [Center for Reinventing Public Education](#) (CRPE) at the University of Washington found

that financial realities could have impacts on whether next gen models can be implemented successfully.³¹ The study is focusing on resource allocation, management of new technology costs, and financial sustainability in the NGLC family of schools. Results from the study’s second-year that also includes district schools are expected in late fall 2014. Difficulty in enrollment forecasting appeared to undermine first-year implementation in the study of eight new personalized-learning charter schools, as did philanthropic contributions that fell short of projections.

Some schools found that changing vendors allowed for significant savings, which allowed budgets to align more closely with sustainability. Implications and recommendations from these results include increasing student enrollment efforts, developing budgets with revenue at 20 to 25 percent below target, and managing product contracts with trial periods to ensure appropriate fits. The bottom line for next gen schools is that setting a high target and a low budget means that schools would be more likely to hit their marks for financial sustainability. In theory it is very easy, but in practice it often means tough decisions for school designers and leaders.

Being a breakthrough school also means doing things that have never been done in order to test what the next generation of schools could and will potentially look like. Being scalable in this case means setting the tone for a new paradigm of learning that future learners and leaders will be integrated into. NGLC launch grant recipient [Ingenuity Prep](#) is starting from the beginning



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LEARNING FROM THE LEADERS

“The seed money from an external funder (grant giver) is certainly the quickest, most effective way to jump start innovation. Perhaps even more important, however, is the learning community provided with others who are seeking to innovate and with experts-in-the-field, as was provided through the NGLC grant.”

— *Hannah Williams, Out of the Box Learning Studio*

ATTRIBUTES IN ACTION

with pre-kindergarten and kindergarten in an effort to prepare students for unencumbered growth.

With more focus on quality, most state charter school authorizers have become more reluctant to approve innovative new school models. Without an approved charter, it is very difficult to raise philanthropic support. Some grantees that failed to gain authorization also struggled to raise funding to cover pre-opening expenses and gave up their plans to open a new school. It is getting more difficult and expensive to gain charter authorization, particularly for innovative schools, and that will slow efforts to make new school development teams more diverse and representative of underserved neighborhoods.

With restrictive authorizing practices for charters, school districts can actually be the easiest place to pilot an innovative school—but that only happens with forward-thinking leadership willing to grant significant autonomy based on a thoughtful proposal. And even then, state testing, accountability systems, seat time provisions, educator certification requirements and funding systems may all prove to be significant barriers to next gen learning in both district and charter schools.

In most cities there is little access to incubation and innovation expertise like that of 4.0 Schools in New Orleans or New Schools for Chicago. Developing a good charter school board is critical, and there is often little help recruiting and training high-quality board members. Given the significant barriers and limited support, selecting a supportive state and city for a new school location can be the most important decision.

Given that each of the grant recipients lies in the realm of public and free education, the ability to bring quality and effective education to all students, regardless of socioeconomic status or place of residence, is the bedrock of what it means to break through traditional ways of doing education. Scaling schools means bringing the best and most successful attributes to a wide enough audience that the impact can help close the national achievement gap, along with preparing wide swaths of the country for college and career readiness. In many ways, the NGLC grant recipients are testing grounds to incubate what the future of impactful education will look like. The schools in this section are optimizing for scale through financial sustainability and scalability. Horry County Schools have successfully transitioned a traditional public school setting—in the midst of a school turnaround—into one that is personalized for its students while keeping focus on reaching financial sustainability. Cornerstone Charter Health and Technology High School has developed a unique and well-defined model of staff roles and student progression that can be replicated. And Lebanon High School highlights the power that pilot programs can have in the shift to a personalized experience for kids.

ATTRIBUTE IN ACTION: Horry County Schools

Horry County Schools | Whittemore Park Middle School | Conway, SC

District, Turnaround | Early Implementation | School Opening Fall 2013

Website: http://www.horrycountyschools.net/pages/Horry_County_Schools

Twitter: @HCSInfo

Facebook: <https://www.facebook.com/HorryCountySchools>

For Horry County Schools (HCS) in Conway, South Carolina, sustainability is key to each and every decision made. The district started with a pilot model at Whittemore Park Middle School. The school was designated in need of improvement and entered the turnaround process, rolling out a student-centered, blended learning iCAN (Individualized, College and career readiness, Aspirations of students, and Network of support) model starting in 2013. The district has found value in a pilot model at the middle school level that implements change quickly and provides a safe haven for building best practices to inform and

transform work throughout the district, and even the entire state. Whether it is technology, content or staffing, the district is careful to keep an eye on scalability.

The district's [Personalized Digital Learning Initiative](#) is designed to shift the district into a 1:1 model in a three-year phase beginning January 2014. Students in grades 6-8 received devices in the first year, and the rollout continues with grades 9-12 in the second year and grades 3-5 in the third and final year. The initiative was funded in part through the local option sales tax for schools; however, the primary goal was to develop a plan that made the initiative sustainable within current resources. This initiative is supported within existing funding with no additional cost to the taxpayers; technology is a capital investment.

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LEARNING FROM THE LEADERS

“The key to transformation lies in nurturing and supporting teachers as learners and leaders. The very qualities, skills and characteristics that we seek to nurture and develop in our students are those we must first nurture and develop in our teachers. Creatively structuring time for professional development, including job-embedded learning, and focusing on leadership opportunities for teachers are essential if we are to transform our educational system.”

— *Beth Havens, Horry County Schools*

Currently in Phase 2 of the initiative, the district is offering a device take-home option for its middle school and high school students. For a \$50 fee, students can transport their devices back and forth between home and school AND will be covered for accidental damage.

When it comes to content, the district is thinking about not only quality and engagement, but also capability for long-term success by analyzing how the programs and tools fit into a sustainable budget. Grant funding from NGLC was used at the Whittemore Park Middle School pilot site to select tools and strategies that supported the district’s identified goals to accelerate achievement, increase engagement and individualize learning.

Funding from NGLC supported trials of digital content, as well as a learning management system ([Education Elements](#)), a framework for enhancing school culture and developing a community of learners ([Quaglia Institute for Student Aspirations](#)), and tools for increasing college and career readiness ([Education Policy Improvement Center](#)).

In conversations with Beth Havens, who works with innovation projects with HCS, Megan was impressed to hear how the blended program at Whittemore Park has been used as an example of a productive shift in the district: “Whittemore Park Middle School teachers and students used a variety of digital and adaptive digital content, we examined growth and engagement of the students, and we used what we were learning in thinking about the best return on investment in content selections as we scaled to other middle schools in the district, realizing that we must choose carefully those products and tools which we could sustain within our current resources.”

When working with digital tools, the reality is that change happens quickly and constantly. Strong professional development combined with ample practice time for students is an important element to successful implementation. HCS approaches

professional development as ongoing job-embedded training that is designed to support and sustain teacher learning. As a district, they are always looking for unique ways to build a better professional learning community through the hosting and sharing of resources, which currently include a range from [Edmodo](#) to [iTunesU](#) to newsletters and the [district Web site](#).

A partnership with Anthony Kim and [Education Elements](#) has helped to develop a train-the-trainer model; district learning specialists, including instructional technology and special education specialists, were trained in a variety of aspects of blended, personalized learning as well as in technological tools. This included the devices and the learning management system, as well as delivery of training to both classroom teachers and to each school leadership team.

In order to achieve true collaboration and community support, conversations, discussions and decisions all involved representatives from multiple parts of the system.

The district attributes much of their successful implementation to the collegial learning community approach. In order to achieve true collaboration and community support, conversations, discussions and decisions all involved representatives from multiple parts of the system (board of education members, learning

services, IT, finance, assessment, facilities, teachers, students, parents, business leaders, community members, postsecondary partners, media, etc.). Havens explains, "Innovation and implementation of new learning models cannot be built in isolation if a district is to succeed in scaling, and honest discussions representing multiple viewpoints provide transparency, clarity, understanding and consensus around the work."

So, has it been easy? Havens truthfully admits:

"It would be naively optimistic and absolutely untruthful to say, 'Yes!' This shift requires strategic thinking, goal setting, planning and iteration; it requires collaboration and communication and creative problem solving and critical thinking; it requires us to be learners and to be leaders, even if at times these roles are new or uncomfortable; it is engaging, challenging and renewing; it evokes a 'can do' and 'one for all and all

for one' Three Musketeers spirit. In fact, it is for us as the adults (and adult learners) in the system exactly the kind of learning experience and environment we want to create for our students."

In a little over a year "typical" teachers in a "typical" public school have begun developing and demonstrating new methods of teaching and learning, along with developing renewed confidence in themselves as learners. This has led to the open sharing of lessons learned and encouraging practices among the teaching staff, as well as with educators and education leaders who come to the school from across the district, the state and the nation to view the school's progress.

Horry County is more than a story of financial sustainability; it is a story of dedication, persistence and true turnaround. It is a great example of the significant change that can be made within the public system and an inspiration to turn around efforts across the country. The summer before Judy Beard became principal of Whittemore Park Middle School, she knew the school needed positive change and that it was ripe for the kind of innovation that turned on the heels of solid finances.

There was a lot to overcome in terms of perception due to situational poverty—there were high free and reduced lunch numbers and a state report card grade of "D." That grade has since changed to "B," and the school is now a model of blended learning and innovation for the district and the state. And they aren't done just yet. With a model of continuous improvement at the heart of what the district does, they are constantly looking for ways to expand their reach and make education better for their students.

Whittemore Park PDL (Personalized Digital Learning) Initiative Update



<http://www.youtube.com/channel/UCASk-KLwW176INaXBf932cKA>



ATTRIBUTE IN ACTION: Cornerstone Health and Technology High School

Cornerstone Charter School | Cornerstone Health and Technology High School | Detroit, MI
Charter, New | Early Implementation | School Opening Fall 2012

Website: <http://www.cornerstonecharters.org/health-high-school/>

Facebook: <https://www.facebook.com/CornerstoneCharterSchools>

[Cornerstone Health and Technology High School](#), a grant recipient in Detroit, Michigan, has a unique model that sets the school's staff up for a more professionally based relationship with students. In order to support academic growth, each staff member has a specific role that provides a unique framework for student and staff interactions. The goal of the charter school is to graduate students who are adept and ready for success in college or a career in the healthcare industry directly after graduating from Cornerstone. To accomplish this, the entire school has been reimagined to target the desired end result for students. Students move in pods of 75 students, and they access personalized content in individual cubicles, using classrooms as breakout/meeting rooms and spaces for project work or small-group direct instruction with a certified teacher.³²

Before opening the charter high school and a feeder elementary school in 2012, Cornerstone had a 20-year track record of operating great schools on limited

budgets. Cornerstone [purchased and renovated](#) an old elementary facility and launched both schools in the same building. The elementary school was modeled after [Rocketship Education](#), a pioneering network in using a lab rotation model to boost staffing productivity. The high school was modeled after [Carpe Diem](#), a school where six teachers serve 300 secondary students with the assistance of several computer lab monitors. In January 2014, the team took on the renovation of another Detroit school site, which is now home to the high school students.

The new school boasts 23,500 square feet of classroom and lab space, provides a unique blended learning space for 600 students and is estimated to save \$40,000 annually due to eco friendly renovations and utility upgrades. What is most striking about visiting Cornerstone schools is the attention paid to culture and character development.

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LEARNING FROM THE LEADERS

“One of our basic premises of ‘working at your own pace’ implicitly assumed that exclusively internal motivators drive working at your own pace. We learned quickly that this isn’t true for most students. There must be a balance between extrinsic and intrinsic motivators to maximize their output.”

— Michael Griffie, Cornerstone Charter Health and Technology High School

While visiting our team was intrigued by the removal of traditional grade-identifying labels such as “freshman” or “sophomore” at the school. Alternatively, students are grouped in pods related to their displayed skill level and moved on a continuum from beginner to professional that is measured through assessments—like standardized tests or data harvested from online activities—or through real-world challenges and self-assessments. Students spend time where they need the most support while having the ability to advance quickly through competencies, with the option to reach into college-level coursework or spend more time on core skills. As students move through the fundamentals, they gain new responsibilities and freedoms that allow for them to take greater control over their learning. Demonstrating competency and time

management leads to an increase in choice over what, how and when a subject is studied. The role of the teacher changes in this setting as well. Teachers and content experts are funneled into a more dynamic student support model that shifts them into the following roles:

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 using 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.

As schools think about optimizing for scale, the creation of a steady professional development and staffing structure is key. Cornerstone has reconstructed a human capital model on an annual expenses projection of \$7,700 per year (by year 4) and rather than depending solely on human capital, they are looking for ways to construct a sustainable model that can be replicated year after year.

What Does it Feel Like to Be a Cornerstone Student?



<http://www.youtube.com/watch?v=-vWGpJGH8-I>

Students have a unique progression at Cornerstone Health and Technology High School that takes a more personalized approach to the education experience.

CORNERSTONE STUDENT PROGRESSION CHART

STUDENT TRANSITION

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 and progress.



A Beginner Student will be those new to the high school or those not yet able to self-manage their time. These students learning plan will meet them 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 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.

Cornerstone Student Progression Chart adapted from NGLC profiles and as seen here: <http://net.educause.edu/ir/library/pdf/ng1204.pdf>



ATTRIBUTE IN ACTION: Lebanon School District

Lebanon School District | Lebanon High School | Lebanon, PA

District, Complete Redesign | Early Implementation | School Opening Fall 2013

Website: <http://www.lebanon.k12.pa.us/high/abouths.php>

Part of being a scalable school means being ready to translate ideas into practical and working models. NGLC launch grant recipient [Lebanon School District](#) is a complete redesign that started with an in-house pilot to try out blended and personalized learning with eight teachers and 214 students before taking it to the entire student body of 1,300.³⁴ The medium-sized district has an 81 percent low-income student population and was looking for a better way to educate its high school-aged students. The goal of Lebanon High School was two-fold: first, to provide

cost-effective learning that was much more personalized than it ever had been, and, second, to show that transforming a “mainstream” school to blended learning was not only possible but very doable. Indeed, the district has been able to implement their model without seeking state policy waivers or renegotiating union contracts.

Giovino explained to Megan that Lebanon High School started the pilot by asking which teachers wanted to be involved; it has grown the initial 10 percent involved in 2012-2013 to 64 percent in 2013-2014. They have also become the first 1:1 school in their county and act as a hybrid learning nexus regionally. The school operates on a block plan and offers dual enrollment—high school and college—credit to key classes including human biology and English composition. Using a

LEARNING FROM THE LEADERS

“Have kids teach the teachers. When they are working together, that is the paradigm we are looking for. The teacher doesn’t have to be the expert. It is us providing the challenging learning environment to help them be successful in 21st-century skills.”

— William Giovino, Principal,
Lebanon High School

rotational blended model, their goal is to “give students a rich learning experience” that encompasses everything from traditional learning, to experiences similar to those in college, to opportunities to develop 21st-century skills, to collaborative experiences including working with peers to solve problems.

Beginning with a pilot program has allowed the school district to extend the reach of the blended and personalized experience. The demonstration of impact and the initial success of the pilot resulted not only in an increase in support for the project, but also a shift that is spreading throughout the district and beyond. Lebanon has been recognized as a model school by the intermediate unit of 26 local schools and is now host to hybrid learning visitors from all over the East Coast. They are also one of the founding districts of the [Pennsylvania Hybrid Learning Institute](#), a network of 33 Pennsylvania schools seeking a more personalized approach to learning for their students. The group, supported by Kevin Dellicker’s consulting firm, takes a collaborative approach working with multiple schools simultaneously to create economies of scale and facilitate cooperation. They use a step-by-step continuous improvement process that is standardized and replicable yet results in customized design plans for each school. They collect data to help schools course correct.³⁵

Lebanon School District Video



<http://vimeo.com/63745132>

LESSONS ON LEADERSHIP



Next Gen Learning requires visionary leadership, strong management and the ability to lead innovation as an iterative process.

Starting a school that pushes the envelope requires visionary leadership. As observed with the NGLC schools, the challenge is to bring that vision to reality. Leaders begin with the end in mind. Larry Rosenstock, [High Tech High](#), says good schools start with a common intellectual mission. They also require a rich vision of a learning environment that works significantly better for students and teachers, as well as the ability to assemble staffing, structures and systems that reflect that vision.

The NGLC grant application process requires applicants to back map from a vision and define what students should know and be able to do, imagine a compelling learning experience, and design the setting, structure, staffing and systems to make it happen.

Visionary leaders must weigh what is desirable to families and educators, what is possible given the state of tools and policies, and what kind of school model is likely to be approved. Leaders must build a web of support for their new school models early on. Appreciating the context, knowing the strengths and limitations of the team, balancing innovation and the ability to execute, and creating the right entry point are all key.

The schools that opened successfully found this balance; the teams that did not open schools unfortunately fell short. Regardless of their ability to open their doors, each of these schools helped to advance the space of next gen learning with their creative visions and ideas for implementation. Through both successes and failures, we learn what works best for students. Our time with these visionary leaders revealed some lessons worth sharing.

NEXT GEN LEARNING REQUIRES VISIONARY LEADERSHIP

Some prospective school leaders didn't fully appreciate the scope of the management challenge and failed to gain approval for their school. Leading a next gen school requires both macro-level visionary leadership and micro-level school management decisions around processes and procedures.

Launching a new school is a challenging project on a dozen dimensions including community building, the educational program, staff development, facilities development, fund raising, financial management, safety and security, technology integration, communications and transportation.



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LEARNING FROM THE LEADERS

“You are running a campaign, and that means creating a culture and community of volunteers. Meet everyone for coffee who is interested in your project. Not only will this help you develop your network, get the word out, and find volunteers, it will also help to keep your spirits up. This work is hard and totally overwhelming most of the time. Meet people who are inspired by your vision to keep you inspired.”

— *Hannah Williams, Out of the Box Learning Studio*

The Danville Schools staff knew they wanted to prepare students differently. They participated in a community conversation that launched new goals starting with powerful learning experiences for every student every day.³⁶ A new vision for a “Danville Diploma” guided everything else in support of the desired student outcome.

Magnolia Montessori For All is a good example of combining best practices from several models and adding a dose of innovation to create an exciting new model of learning.

In the case of the MakerSpace at Lakewood City Schools, a team of intrepid teachers was able to secure a planning grant to turn a dream of a district makerspace project into action but didn’t receive the autonomy and funding required to launch a new school. For Out of the Box Learning Studio, a declined charter for the 2014 school year led to a sincere reflection on the part of Hannah Williams, the school’s designer and project leader, in which she determined that her strengths aligned more with instructional leadership than school development. At the time of publication, the board has decided not to move forward with opening a school.

Making sure the support exists, whether it is from the local community, district, administration or staff, is necessary to success.

Grantees appreciate the power of the NGLC network for support and expertise. Collaborating to create the experience of a school is a powerful way to build something lasting and supportable while making it manageable. Using existing networks of experts and practitioners is an invaluable asset as well, whether it’s in curriculum design or managing real estate. Piedmont Middle School is located in a rural community, yet they have been able to be innovative due to relationships with NGLC, the League of Innovative Schools and regional support.

NEXT GEN LEARNING REQUIRES STRONG MANAGEMENT

There are so many decisions to be made during the planning phase that it is easy to become distracted and spend too much time on topics not on the critical path to opening a great school. It’s critical to build and fund a project plan and stay focused on key variables. Financial surprises are manageable if anticipated but extremely hard to manage at the last moment.

Starting something as complex and public as a school requires a large amount of tenacity and focus.

Brooklyn Laboratory Charter School makes an attempt to infuse the key attributes of joy and rigor into its design, identifying boundaries that push and reward, keeping students and teachers moving forward with hard work and lots of smiles. The hiring process to get the right people in place has a direct relationship to the goals of LAB as well. With large numbers of applicants for every potential teaching position, those who rose to the top were asked to come in and teach a lesson, were given feedback, and then asked to come in and re-teach the lesson. Part of the hiring selection was based upon a candidate's ability to respond effectively to and integrate communicated feedback. LAB founders also have remarkable and complementary management experiences. They have assembled a diverse and talented team willing to put in the hard work to open a new school.

LEADING INNOVATION IS AN ITERATIVE PROCESS

Starting something as complex and public as a school requires a large amount of tenacity and focus. Having plans for the inevitable deviations and issues that arise will help the process run smoothly in the face

of obstacles. Keep the vision in focus, but allow for flexibility to keep the vision from becoming stagnant and fractured. USC Hybrid High had a rough go of making technology work in its first year and has since tweaked the experience to give teachers more control—keeping the vision strong but altering the path to accomplish it.

LAB, EAA and Summit all found commercially available learning platforms inadequate to support blended, personalized and competency-based learning. With a funding partner and a technology partner, they are all using the [lean startup](#) methodology and developed custom platforms closely coupled to new school models—and they simultaneously iterate on both.

Summit opens at least one new school each year and works to strengthen their model by making continuous improvement to the learner experience based on student needs. Combining organizational design with technology design is yielding promising results in both cases.

CONCLUSION

The NGLC grant recipients represent the diversity of public schools—from start-ups to turnarounds, spanning the country and serving diverse but predominantly high-need student populations. For some of the school designers we interviewed, the planning grant felt like the saving grace to take an idea to reality in the year or two before their school ever saw students and public funding. For district schools we tracked that had new missions in mind, these grants created flexibility and space to establish operational feasibility.

The decision to start something new that can yield strong, lasting results is one made from courage and grit. As these schools have shown, next gen learning environments may be challenging to achieve but they are possible within the existing system. With the proper tools and support—whether it's funding or a network of like-minded individuals—creating next gen learning environments is a task that ultimately can be successful. These are real schools doing real things for real kids. They share the common attitude of positive outcomes and seeing potential instead of roadblocks or limitations.

NGLC and the schools it supports are in the arena of education providing the path forward to create healthier and more productive learning environments for children. In this space there is no “silver bullet” or

panacea, but rather well-intentioned individuals working together and learning from the iterative implementation of best practices.

The NGLC schools will continue to evolve as they strive to create personalized learning environments for their students. Additional new schools and conversions will be supported through the NGLC Regional Funds, an effort to catalyze next gen schools in large part through the local networking support (and matching funds) provided by regional or city-based incubator organizations. The educators and school developers that NGLC supports share a common passion for creating successful and highly impactful schools. From new school startup to turnaround school redesign, the leaders of these schools are driven by passion and personal connections to the institutions they want to see succeed. They are not bomb-throwers aiming to completely deconstruct everything about the current system. Most of the school leaders have come through the ranks of public schools and share a spark and excitement for education that is contagious—exactly what supporting these redefined schools is all about. May their example, along with their most promising practices and their most edifying failures, be a continuing inspiration to us all.

MAN IN THE ARENA

It is not the critic who counts; not the man who points out how the strong man stumbles, or where the doer of deeds could have done them better. The credit belongs to the man who is actually in the arena, whose face is marred by dust and sweat and blood; who strives valiantly; who errs, who comes short again and again, because there is no effort without error and shortcoming; but who does actually strive to do the deeds; who knows great enthusiasms, the great devotions; who spends himself in a worthy cause; who at the best knows in the end the triumph of high achievement, and who at the worst, if he fails, at least fails while daring greatly, so that his place shall never be with those cold and timid souls who neither know victory nor defeat.³⁷

— *Theodore Roosevelt*

DISCLOSURES AND ENDNOTES

DISCLOSURES

Agilix and Digital Learning Now are Getting Smart Advocacy Partners and Edmodo is a Learn Capital Company where Tom Vander Ark is a partner.

ENDNOTES

¹ For an overview of next gen learning, see <http://gettingsmart.com/2014/06/moving-towards-next-generation-learning>.

² Learn more about the hurdles and get guidance from “Core and More” from Digital Learning Now at <http://digitallearningnow.com/site/uploads/2014/05/FINAL-Smart-Series-Core-and-More-Guidance.pdf>.

³ NWEA. “College Readiness Linking Study.” December 2011. http://www.nwea.org/sites/www.nwea.org/files/ACT_LinkingStudy_1%2017%202012.pdf

⁴ Opportunity Culture outlines a vision to improve this statistic at <http://opportunityculture.org>.

⁵ Freeland, J. “Blending Toward Competency.” Clayton Christensen Institute for Disruptive Innovation. May 2014. <http://www.christenseninstitute.org/publications/blending-toward-competency>

⁶ “Danville Schools earn national grant.” Advocate Messenger. July 16, 2013. http://www.centalkynews.com/amnews/news/local/danville-schools-earn-national-grant/article_72fc6d39-8fe6-57c4-87f4-0c56da0731a6.html

⁷ Vander Ark, T. “Good schools start with good goals.” Getting Smart blog. Dec 2012. <http://gettingsmart.com/2012/12/good-schools-start-with-good-goals/>

⁸ See the pictures and learn more at <http://gettingsmart.com/2013/10/leading-powerful-learning>.

⁹ Schneider, C. “Performance Based Assessment in Action,” Getting Smart blog. May 2014. <http://gettingsmart.com/2014/05/performance-based-assessment-action-2/>

¹⁰ Brock, D. “Project-based learning at DHS draws national attention.” Central Kentucky News. April 21, 2011. http://articles.centalkynews.com/2011-04-21/amnews/29461667_1_students-dhs-national-attention

¹¹ See Cotner’s full staff profile and learn more about her philosophy at the Magnolia Montessori For All website at <http://magnolia.montessoriforall.org/about-us/staff>.

¹² For a student perspective on testing, as well as other perspectives, see <http://www.npr.org/2014/04/30/308377806/as-testing-season-opens-in-schools-some-ask-how-much-is-too-much?ft=3&f=2,3,5,7,10,13,35,39,46>.

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¹⁴ Ibid.

¹⁵ Vander Ark, C. “Magnolia Montessori Begins to Bloom.” Getting Smart blog. October 2014. <http://gettingsmart.com/2014/10/magnolia-montessori-begins-bloom/>

¹⁶ NGLC. “USC Hybrid High School.” <http://www.educause.edu/library/resources/usc-hybrid-high-school>

¹⁷ Ibid.

¹⁸ Sicut, O. “Iterating Rapidly: How a flexible model turned USC Hybrid High into a high-performing school in 30 weeks.” Blend My Learning blog. March 2014. <http://www.blendmylearning.com/2014/03/26/iterating-rapidly/>

¹⁹ Learn more about the EAA at <http://www.michigan.gov/ea>.

²⁰ Sturgis, C. Student-Centered Learning at Michigan’s Education Achievement Authority. Competency Works blog. October 2013. <http://www.competencyworks.org/2013/10/student-centered-learning-at-michigans-education-achievement-authority/>

²¹ Salgarkar, R. “Learning Management Systems (LMS) Market Worth \$7.83 Billion by 2018 Forecasted in MarketsandMarkets Recent Report.” Marketwired. October 2013. <http://www.marketwired.com/press-release/learning-management-systems-lms-market-worth-783-billion-2018-forecasted-marketsandmarkets-1845977.htm>

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²³ U.S. Department of Education. “National Educational Technology Plan 2010.” November 2010. <http://www.ed.gov/technology/netp-2010>

²⁴ Vander Ark, T. “Engagement & Employability Driving Next Gen Platforms.” Getting Smart blog. November 2013. <http://gettingsmart.com/2013/11/engagement-employability-driving-next-gen-platforms>

²⁵ Watch Tavenner explain her philosophy at the 2012 Lean Startup Conference at <https://www.youtube.com/watch?v=0chGz5ZlKUE>.

²⁶ Vander Ark, T. “Summit Denali: Engaging Student-Centered High School Model.” Getting Smart blog. June 2013. <http://gettingsmart.com/2013/06/summit-denali-engaging-student-centered-high-school-model/>

²⁷ Ibid.

²⁸ Learn more about the joy-rigor paradox at <http://gettingsmart.com/2014/01/joy-rigor-solution>.

²⁹ Learn more about iPrep at <http://gettingsmart.com/2012/10/iprep-the-miami-flex>.

³⁰ Next Generation Learning Challenges. “Request for Proposals: NGLC Wave IV, Cycle Two and Breakthrough Schools Regional Fund.” http://nextgen-learning.org/sites/default/files/supportingdocs/NGLC%20Wave%20IV%20Cycle%202%20%26%20Regional%20Fund%20RFP_v4_1.pdf

³¹ Miller, L., Gross, B. and Lake, R. “Is Personalized Learning Meeting Its Productivity Promise? Early Lessons from Pioneering Schools.” Center for Reinventing Public Education. May 2014. <http://www.crpe.org/publications/personalized-learning-meeting-its-productivity-promise-early-lessons-pioneering-schools%20>

³² See Cornerstone’s full NGLC profile at <http://www.educase.edu/library/resources/cornerstone-charter-schools-cornerstone-charter-health-high-school>.

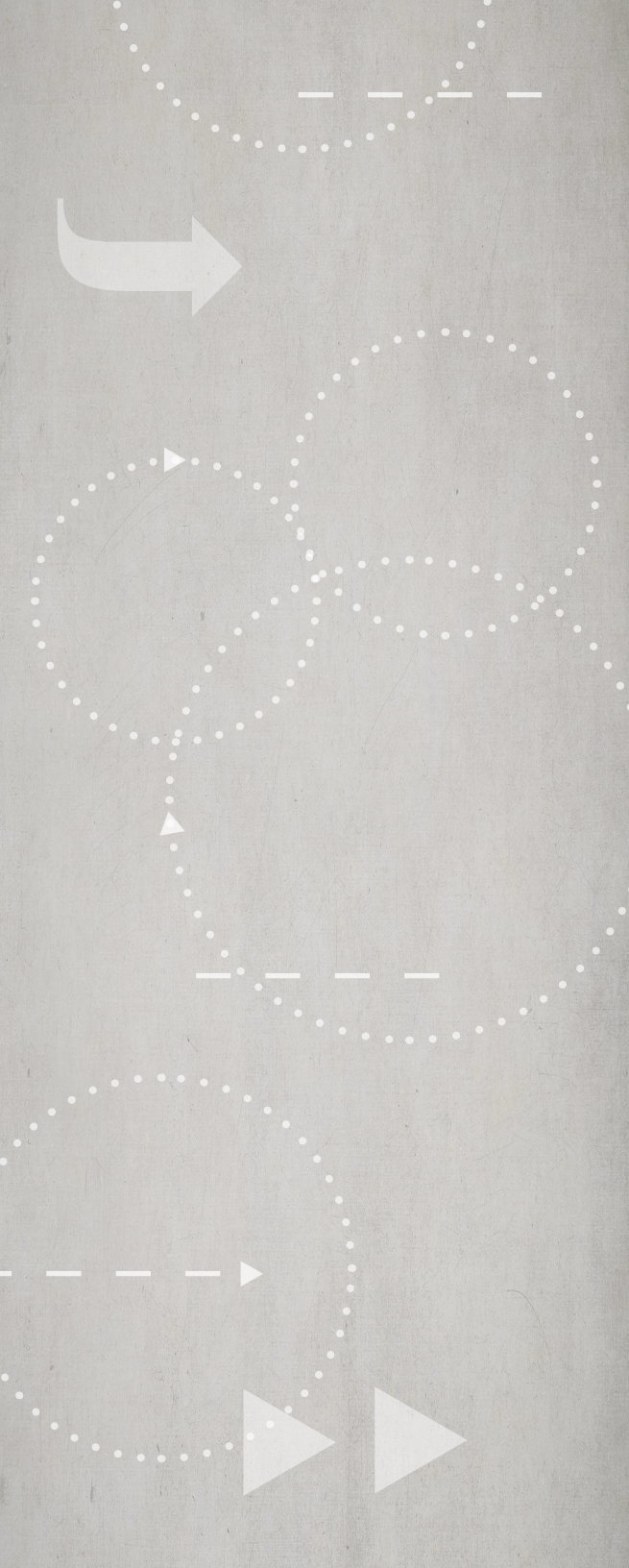
³³ See more about Cornerstone faculty roles at <http://www.cornerstonecharters.org/health-high-school/board-faculty>.

³⁴ See the Lebanon School District’s NGLC grantee profile at <http://nextgen-learning.org/grantee/lebanon-school-district>.

³⁵ Vander Ark, T. “Hybrid Learning Shows Results, Achieving Scale In Pennsylvania.” Getting Smart Blog. November 2013. <http://gettingsmart.com/2013/11/scaling-blends-pennsylvania/>

³⁶ For more on the power of goal-setting, see Getting Smart’s “Good Schools Start With Good Goals” at <http://gettingsmart.com/2012/12/good-schools-start-with-good-goals>.

³⁷ Roosevelt, T. “Citizenship In a Republic.” Speech delivered at the Sorbonne. Paris, France. April 23, 1910. <http://www.theodore-roosevelt.com/trsorbonnespeech.html>



[Next Generation Learning Challenges \(NGLC\)](#) accelerates educational innovation through applied technology to dramatically improve college readiness and completion in the United States. This multi year program provides investment capital to expand the use of proven and emerging learning technologies, collects and shares evidence of what works, and fosters innovation and adoption of solutions that will dramatically improve the quality of learning in the United States, particularly for low-income students and students of color.

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