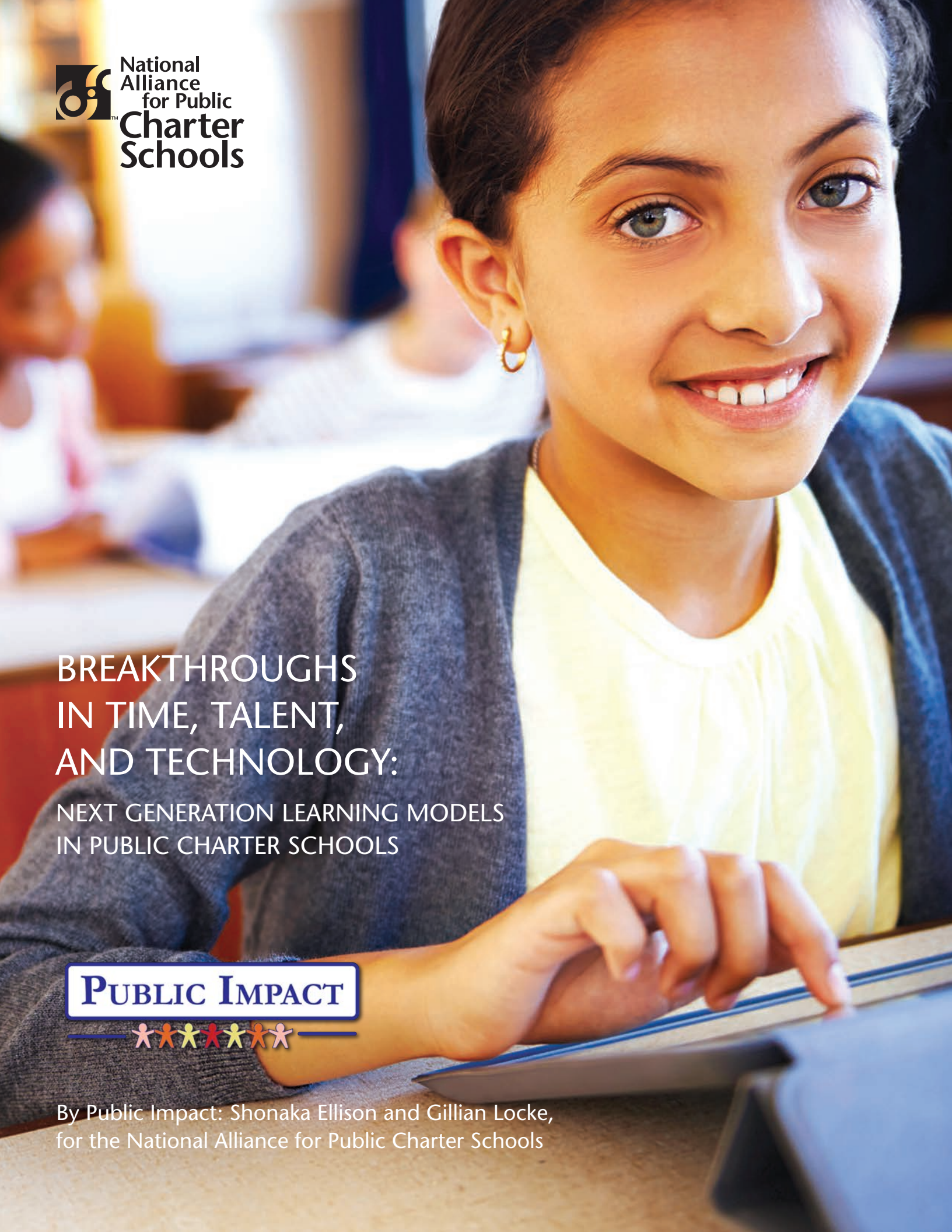

National Alliance for Public Charter Schools

BREAKTHROUGHS IN TIME, TALENT, AND TECHNOLOGY:

NEXT GENERATION LEARNING MODELS IN PUBLIC CHARTER SCHOOLS

PUBLIC IMPACT

By Public Impact: Shonaka Ellison and Gillian Locke, for the National Alliance for Public Charter Schools

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INTRODUCTION

Schools in the United States today by and large follow a fairly traditional model. Most teachers deliver content to classrooms of students with a wide range of skill levels and needs. Students advance from one topic to the next according to the teacher's lesson plan, sometimes when they have not yet mastered the material. Students and teachers in middle and high schools typically move between classes according to a rigid bell schedule.

Meanwhile, teachers often work in isolation from one another, with little time during the school day to plan and develop together. They are paid according to a set salary schedule. If great teachers want to take on more responsibilities for higher pay, they generally have to leave the classroom – and the students who need them.

Students and teachers may use technology to supplement instruction from time to time, but it is often an afterthought to in-person instruction.

Several new schools, however, are breaking with this model so that they can deliver a more personalized experience to students. But in order to do this, they need certain autonomies, especially with respect to the ways they can use time, talent, and technology. Since the public charter sector is uniquely positioned to provide many of these autonomies, it may offer a particularly welcoming space for these next generation learning models.

This issue brief explores the ways that next generation learning models use time, talent, and technology; the autonomies they require; and how the autonomies in the public charter movement can align with what next generation models need to be successful.

WHAT ARE NEXT GENERATION LEARNING MODELS?

The term "next generation" connotes for many the idea of "technology enabled," or using technology to enhance a certain product or process. But next-generation models move beyond technological innovation. These models' core goal is to truly personalize learning so that each student can reach his or her potential. To do this, next generation models must use time and talent—in *addition* to technology—in ways that differ significantly from the traditional school model.

TIME

Rather than following a traditional bell schedule, students and teachers in schools implementing next generation learning models move between instructional activities according to individual student needs.

Students rotate between personalized digital content and other learning experiences, such as one-on-one instruction with a teacher, small-group instruction guided by a tutor, and group or individual assignments. To do this, students may stay in one classroom with several "stations" for different learning experiences or move between several different classrooms or labs.[1] Students can move between experiences on a fixed schedule, at the instructor's discretion, or even at the student's discretion.[2]

Students might have more time to focus learning on their specific needs than they would in a traditional school model, or they may learn outside of the school building, spending school day time in internships or post-secondary courses. For example:

- **Alpha: Blanca Alvarado Middle School,** a school in San Jose, Calif., follows a longer academic calendar and offers a monthly Saturday academy and an after-school academy for struggling students.[3]
- **Da Vinci Communications** in Hawthorne, Calif., allows students to collaborate with other students, instructors, and local industry experts to develop projects that "bring professional practice to the classroom," combining internship opportunities with rigorous classroom work.[4]

Teachers work with targeted groups of students or individuals while other students spend time in a digital learning environment. This practice allows teachers to provide a more individualized experience for more

students than they could by delivering instruction to a class with varying mastery levels.

Teachers also have time to plan and collaborate because students spend age-appropriate portions of the school day engaged in self-directed learning activities. That frees time for teachers. Rather than teach in isolation, teachers can spend this freed time working together to review data on student progress and make decisions about upcoming instruction. Freed collaboration time also allows good teachers to learn from excellent colleagues rather than spending most of the school day going it alone.[5]

TALENT

Next generation models need accountable adults to oversee a variety of learning experiences, which means instructional staff have options for roles and career paths that best fit their skill levels and expertise.[6]

Teachers at all grade levels may specialize in their preferred subject and reduce other administrative duties so that they can reach more students with excellence. Paraprofessionals or tutors can assume those administrative duties, oversee self-directed work in digital labs, provide limited instruction, or oversee group work.

Excellent teachers with a proven track record may lead and develop teams of other teachers. They may also plan lessons or develop strategies to get struggling students up to speed. Regardless of the roles teachers assume, they have more opportunities to develop professionally. As they do, they can advance to roles that do not take them away from direct responsibility for student learning.[7]

Existing next generation models have adopted a variety of roles and career paths:

- **Merit Preparatory Charter School of Newark** in Newark, N.J., has three "rungs" in its career ladder, with pay that reflects teachers' responsibility and impact.
  - *Associate teachers* are entry-level teachers who provide tutoring, supervise online learning, grade student work, and handle administrative tasks.
  - *Teachers* provide direct instruction and interventions and facilitate small-group activities.
  - *Master teachers* lead and develop a subject-specific team that includes a teacher and an associate teacher.[8]
- **Rocketship Education** in San Jose, Calif., gives teachers different roles according to their skillset and the grade level they teach. While Rocketship's model continues to evolve, here was the line-up of roles in the 2013–14 school year:
  - *Grade K–3 teachers* specialize in one subject pair, either language arts and social studies or math and science, and provide targeted instruction to students.
  - *Grade 4–5 teachers* work in teams of three to oversee large classrooms of students and may specialize in one subject or develop specializations within a subject, such as leading small-group differentiated reading instruction.
  - *Lead teachers* have a full teaching load and facilitate teacher collaboration by planning and setting meeting agendas and analyzing student data.
  - *Individualized learning specialists* oversee digital labs and tutor students in basic skills.[9]
- **Cornerstone Charter Health + Technology High School** in Detroit, Mich., offers several unique, specialized roles, providing many different opportunities for teachers to excel and grow.
  - *Relationship managers* use student data and teacher feedback to help students set and meet their goals.
  - *Relevance managers* then provide direct instruction and support to students in the design and evaluation of real-world projects and internships.
  - *Rigor managers* oversee students' online course work.
  - *Success coaches* help students with the transition to college and career.[10]

For more examples of roles and career paths, see featured next generation model case studies, beginning on page 6.

TECHNOLOGY

Technology can serve as a powerful tool for enabling strong pedagogy that helps students learn. It allows students to control the nature and pace of an age-appropriate portion of their own learning and supports individualized instruction by providing teachers with student data and freeing up time during the school day.

Students spend time in a self-directed, digital environment, where they can choose from a menu of learning options to reach their goals. They also receive instant feedback on their progress so that they can quickly learn from mistakes without waiting for assessment from a teacher and can track progress through a given subject. Thus, students gain ownership over part of their own learning and become motivated to think critically about how to achieve their mastery goals.[11]

Students advance through content at their own pace, which enables them to achieve mastery in an area and then move on to new topics instead of waiting on their peers. Alternatively, if students struggle with a certain concept, they can stay on the topic until they master it, while teachers have the flexibility necessary to provide more targeted support as other students move to other topics.[12] Advanced adaptable software may also adjust a student's tasks based on performance, with embedded assessments to summarize student progress and provide rapid adjustment and response to student needs.[13]

Data generated from digital platforms allow instructors to better individualize instruction for their students. For example, teachers and learning coaches can use data generated for individual students to observe trends in mastery and adjust their plans for future instruction.[14] As a result, they can spend school day time teaching rather than administering student assessments.[15]

Ways to deliver digital content vary, as students may have their own laptops or tablets or there might be labs or designated areas of classrooms that contain computers for student use. Students may receive content in the form of online tutorials, interactive content, or videos. In addition to providing content, digital platforms contain curriculum mapping tools, assessment tools, or social platforms for peer-to-peer support.[16] Students may work alone on digital content or collaborate with peers on projects.

NEXT GENERATION MODELS IN PUBLIC CHARTER SCHOOLS

Although early results of next generation learning models are mixed, several have shown promise, especially with traditionally low-performing students.[17] Of course, positive student results heavily depend on quality implementation. All elements of a new model—new schedules, new roles, and new technology—will only boost student learning if they are orchestrated to create personalized, high-quality student learning experiences that fuel youth development.[18]

To fully realize their potential, next generation models require approaches to time, talent, and technology that personalize student learning with freedom from certain common constraints. Thus, next generation models can fit nicely within public charter schools, which offer several autonomies in exchange for heightened accountability for student learning. Public charter schools also have the flexibility, if not the imperative, to develop innovative approaches to educating students.

LEGAL FREEDOMS

Next generation models need three broad types of autonomies that public charter schools can provide: they need freedom with respect to scheduling, instructor roles and career paths, and how they can spend school funds.

Scheduling

In order for students and teachers to move fluidly through content areas and activities within a typical school day, next generation models need freedom from the scheduling constraints that have been written into state law and district policy for many noncharter schools. For example:

- **"Seat time" rules** prescribe set amounts of time students must physically spend in a classroom in order to receive credit for a particular course.[19] These rules can stand in the way of schools that want to allow students to zoom ahead at their own pace, moving along as they master each concept.
- **Rigid class size restrictions** limit the number of students that a single teacher can oversee.[20] These constraints can make it hard for schools to group and regroup students to meet their needs or to enable great teachers to reach more students.

- **Rigid schedules** often do not give teachers flexibility to work with several targeted student groups or individuals or allow them enough time to plan together as a team. These schedules also dictate when school must begin in the morning and end in the afternoon.

Public charter schools, however, often operate free of these constraints,[21] so students can more fluidly advance through content as they master it, teachers can oversee larger groups of students working independently, and teachers have the flexibility to spend targeted time with certain students or make time during the school day for job-embedded professional learning. Public charter schools also have the freedom to adjust daily school hours so students with jobs or other time constraints can attend school on a more flexible schedule.

Instructor roles and career paths

Next generation models need the flexibility to use talent differently than the roles and career paths that traditional school models typically prescribe. For example:

- **Traditional salary schedules** determine the kinds of roles that teachers can have as well as the ways those roles are compensated.[22] They do not support the range of instructional roles and advancement opportunities that next generation models offer—or support career advancement by providing opportunities for authentic teacher leadership. They do not allow next generation schools to pay great teachers more for taking on more responsibility.

- **"Line of sight" rules** require that a certified teacher supervise students at all times.[23] They prevent paraprofessionals from taking responsibility for students for limited periods during the school day so that teachers can deliver targeted instruction to small groups of students, analyze student data to plan for upcoming lessons, and make time for job-embedded professional learning.

- **Licensure restrictions** mandate that teachers must be licensed, sometimes in specific disciplines.[24] They make it challenging for schools that want to use teaching methods that cross the lines of traditional disciplines.

The degree of autonomy that public charter schools can provide with respect to licensure and line of sight rules varies according to state law. However, public charter schools in several states do have the freedom to give adults in a variety of roles responsibility for students during limited periods of the school day.[25] While teachers remain in charge of student learning, mobilizing other adults for tutoring, overseeing projects, and monitoring digital learning lets teachers engage more deeply with more students and with their colleagues.[26] And public charter schools typically offer the freedom to staff schools according to what makes most sense for the instructional model and compensate different roles commensurate with the degree of responsibility they take for student outcomes—and the results they achieve.[27]

Funding

Next generation models need flexibility to determine the right combinations of teachers, other staff, and technology. However, school funding formulas for traditional schools are often designed to guide how school personnel are allowed to spend school funds and how much of their funds they can spend on certain items. For example:

- **Program-based funding allocations** often require schools to follow certain staffing models, buy certain instructional materials, and limit technology purchases to very specific options.[28] As a result, traditional schools typically do not have the flexibility to decide how to staff their schools or invest in hardware, software, or infrastructure such as high-speed internet connections. They also lack the autonomy to pilot emerging technology with students.

- **Funding for technology** is typically treated as a supplemental expense rather than an investment in a core component of the instructional model. But if next generation models rely on digital resources to deliver a portion of the instructional content, school personnel need to be able to determine which and how much technology will best support student learning.[29]

While state charter school laws require public charter schools to spend public funds in a financially responsible manner, their leadership has far more autonomy to determine how to allocate resources than they would have in most traditional school systems.[30]

FREEDOM TO INNOVATE

Public charter schools offer another crucial autonomy: the freedom to innovate. Diane Tavenner of Summit Public Schools in the San Francisco Bay Area explained, "Because we are a charter, the charge is to be innovative. It's in the law. So that is who we are, and it is important to what we're doing." For next generation models, which by definition are employing uses of time, talent, and technology that diverge from a traditional school model, the importance of innovation must be core to school culture.[31] If students, parents, teachers, and school leaders do not coalesce around the shared belief that experimenting with new ways of teaching and learning will lead to better results, next generation schools will not have the momentum to keep working through the challenges that new models can present.

Next generation models can take two different approaches to building this culture of innovation. In the case of next generation models that open as brand new programs, school leaders can recruit teachers and families who are open to school days looking dramatically different from those of traditional models and build an innovation mindset into school culture from day one. School leaders will not have to get buy-in from people who are satisfied with a more traditional model or have to undertake a potentially large change management process as the school makes necessary classroom design and staffing structure changes.

On the other hand, if a high-quality public charter school transitions from an established traditional model to a next generation approach, school leaders will face a change management process that includes building a culture around the new model. In a school with a strong existing culture, however, students, parents, and teachers already trust the school leadership and are committed to the school's mission. They therefore may be more willing to try out a model that is different from what they are used to.[32]

While public charter schools offer the flexibility next generation models need to explore innovative uses of time, talent, and technology, experience suggests that successfully replicating public charter schools that achieve the same results as the original model is challenging.[33] As the movement has coalesced around replicating successful models, the field expects great results right away. But achieving those results often takes time.[34] Next generation models will take several iterations to get it right,[35] and even then, they must continually evolve to meet the changing needs of the populations they serve. The charter sector is well suited for this kind of evolution, since school leaders and teachers can tweak and revise their approaches daily without having to seek approval from higher authorities.

IMPORTANCE OF A STRONG AUTHORIZER

When we think about constraints to next generation models in public charter schools, we often first think of policy barriers. While policy barriers and legal constraints are important considerations, authorizer quality is another key variable. In some cases, charter authorizers themselves introduce policies that place constraints on how schools use time, funding, and talent, while in other cases, authorizers actively protect autonomies in these areas. For example, Aaron Cuny of Ingenuity Prep held up the DC Public Charter School Board as an authorizer that has effectively advocated for charter school autonomy. Because of the Charter Board's work to protect D.C. public charter schools from ramped-up reporting requirements, charter school leaders in the district have been able to keep attention focused on their core mission—delivering quality education to their students. This focus on preserving charter school autonomy also makes D.C. a welcoming space for next generation learning models.

NEXT GENERATION LEARNING MODELS IN PUBLIC CHARTER SCHOOLS

This section includes brief case studies of four next generation learning models in public charter schools. Most models featured are nascent: Two first launched operations in 2013, and one began serving students in 2014 after completing a small pilot in the prior school year. These case studies are intended to highlight new, promising developments in the field, not programs with long track records of success.

VENTURE ACADEMY

Location: Minneapolis, Minnesota
First school year open: 2013–14

2014–15 Demographics:

- 95 percent eligible for free or reduced-price lunch
- 20 percent special education
- 60 percent English language learners
- 19 percent black
- 55 percent Hispanic
- 6 percent white
- 6 percent Asian
- 14 percent other (American Indian)

Total enrollment: 200 students

The model

The cofounders of Venture Academy noticed that elite college preparatory schools teach their students how to manage their own education and produce motivated, college-ready students. Students in high-poverty schools, however, were not developing this skillset. So the founders designed Venture Academy, a next generation school that primarily serves students who have not reached their full potential in traditional learning environments, with the goal of creating "independent, self-directed, intrinsically motivated learners, without restraints related to age or grade level."

Time @ Venture

Venture students are divided into three "communities," initially by grade level. Communities follow a flexible grouping model that allows teachers to group students according to need on a given topic. For example, one teacher may support up to 30 students on digital content, while another teacher works with a small group of 10 students. Different groups of students move between stations with different learning experiences—including interdisciplinary project-based learning, digital content, independent work, and tutorials—throughout the course of the day. The school plans to give high school students even more flexibility with their time during the school day by allowing them to spend half or more of their time enrolled in college courses or internships.

Talent @ Venture

Each community has one math teacher and one English language arts teacher as well as an electives teacher who rotates between communities. One English language learner specialist and several special education teachers also serve all three communities. Venture aims to promote a culture of teacher leadership by assigning a "leader" in each community and each content area. Teachers also participate in mutual peer observations and have opportunities to provide and receive real-time feedback throughout the school year.

Technology @ Venture

The technology budget at Venture Academy is actually smaller than those at traditional schools. Jon Bacal, chief executive officer and cofounder, said that the planning team was intentionally conservative in the model design. The team determined that quick online access was more important than hardware with lots of bells and whistles, so they decided to spend much of their technology budget on high-speed broadband while saving costs on hardware by purchasing refurbished laptops from the Minnesota Computers for Schools program.[36] Students use digital content from iREADY, Achieve3000, and Khan Academy, though the mix varies based on individual student needs. Bacal says, "It's not about the technology. The technology is really there to support instructors as they tailor to the students' individual needs."

Crucial autonomies

Venture Academy **does not have to follow seat time rules,** so teachers have much more control over how to target their time than they might in a traditional setting. Without this flexibility, the school would not be able to group students according to mastery levels, which is a core component of its instructional approach.

Additionally, because Venture Academy's model has the **space to encourage and prepare students to take charge of more of their own learning,** the portion

of the school day students spend engaged in digital and team project-based learning replaces some of the time teachers would normally spend on whole-group instruction. The school anticipates that eventually it will require fewer instructors per student, and the **flexibility it has over funding** will allow it to redirect savings generated to higher salaries than most typical salary schedules would permit.

One of the most important autonomies that Venture Academy needs for its model is the **ability to develop a unique school culture.** Student-directed learning is core to the school's culture; the model centers around the premise that students learn best when they can develop the ability to measure their own progress, take responsibility for improvement, admit failure, and share lessons. Without the autonomy to instill these skills in its students, the school would not be able to give students so much ownership over their own learning.

MATCH NEXT

Location: Boston, Massachusetts
First school year open: Pilot started in fall 2013

2014–15 Demographics:

- 86 percent eligible for free or reduced-price lunch
- 18 percent special education
- 74 percent English language learners
- 26 percent black
- 66 percent Hispanic
- 4 percent white
- 2 percent Asian

Total enrollment: In 2013–14, Match Next was a pilot program that ran for a half day for all 50 of the fourth graders at Match Community Day. In 2014–15, a new Match Next school serves 50 students and aims to grow to 200 students by 2017.

The model

Match Next is a new school from Match Education, which operates three other high-performing public charter schools. "High-dosage tutoring" is core to all Match schools (see sidebar). In response to the difficulty that nearly all high-performing public charter schools have with finding excellent teachers, however, Match leaders wanted to experiment with a model that is primarily staffed by full-time tutors, or the "Match Corps."

HIGH-DOSAGE TUTORING

Students at all Match schools receive a portion of their instruction from full-time tutors. Most tutors have recently graduated from college and are seeking a first job that will make a difference, much like candidates interested in Teach For America or AmeriCorps. All tutors are carefully chosen through a competitive selection process and make a one-year commitment to serve at their Match school. Students in existing Match schools spend two hours each day in two-to-one pairings with a tutor, receiving the rest of instruction from classroom teachers. Match has found tutoring to be crucial for providing students with personalized support as well as a strong relationship with an adult.

Time @ Match Next

Unlike the other Match schools, there are no teacher-led classrooms at Match Next. Instead, rooms hold up to 50 students who spend the day working directly with tutors overseen by master teachers. Students also may work in digital environments or directly with the master teachers. These master teachers spend their time developing curricula, preparing lessons, coaching teams of tutors, and leading tutorials. And because they do not have to deliver lectures to large groups of students, they have time to circulate through the class and work one-on-one or with small groups of students throughout the day.

Talent @ Match Next

The tutor and master teacher roles each serve very specific purposes. In addition to providing personalized instruction to students, tutors support social-emotional development among the small groups of students with which they work. For example, they help build relationships with families by calling each student's home every week to update parents on student progress. Tutors also take responsibility for grading and other administrative tasks.

Master teachers are typically either veteran teachers with strong leadership skills or former administrators who want to return to instruction. Regardless, they must have deep experience both with delivering instruction and working with new teachers. Because the tutors take care of tasks that do not require extensive classroom training or experience, master teachers use their expertise for higher-leverage tasks, such as analyzing student data to plan the content that tutors will deliver to students or providing strategic intervention to struggling students. They also provide job-embedded professional learning for the tutors by coaching them during daily meetings, which ensures

that all tutors continue to develop and provide solid instruction to the students they supervise.

Technology @ Match Next

Match leaders learned through their experiences with the other Match schools that the manner in which technology is used is just as important as deciding which tools to use. So when they designed Match Next, Match leaders also wanted a space to develop and share knowledge about how particular technologies actually drive academic gains among high-poverty students. To this end, the school has a dedicated staff member that tests out various software and hardware products and blogs about results of teachers' experiences with them so that other schools and educational technology providers have more information on product effectiveness. Currently, the students use a variety of software, including content from Khan Academy and TenMarks for math, Accelerated Reader and NoRedInk for English language arts, and Scratch for computer programming basics. All students receive a Kindle e-reader for reading at school and at home and a Google Chromebook to use for online instruction at school.

Crucial autonomies

The **flexibility to create different roles for adults that oversee student learning** is critical for Match Next's model. If public charter schools in Massachusetts had to follow strict licensure rules, the school could not depend on carefully selected and trained tutors to deliver the majority of instruction. The **autonomy to determine how to spend funds** is also extremely important for Match Next's staffing model and approach to technology. With freedom from a set salary schedule, Match Next can afford to hire enough adults to ensure a minimum small group ratio of six students to one tutor and reallocate savings from low tutor salaries to attract master teachers by offering more than they might earn in other, more traditionally staffed schools.

The school also faces **no procurement process barriers to testing and investing in new technology**. The ability to experiment with different software and hardware allows Match Next to determine the best, most cost-efficient technology for its needs. Consequently, the school can serve as a "dynamic testing ground," with space to experiment with different technology and share findings and lessons learned with the field.

INGENUITY PREP

Location: Washington, DC
First school year open: 2013

2014–15 Demographics:

- 100 percent eligible for free or reduced-price lunch
- 15 percent special education
- 0 percent English language learners
- 98 percent black
- 2 percent other

Total enrollment: 200 students in pre-K and Kindergarten

The model

Ingenuity Prep cofounders set out to create a new school model that would do more than just educate students—it would grow civic leaders. They solicited feedback from both education experts in the city and top charter school leaders from across the country and ultimately designed a next generation model aimed at providing more learning time and finding scheduling efficiencies in order to allow both rigorous core content instruction and 21st-century civic leadership development.

Time @ Ingenuity Prep

Through an extended day and year model, Ingenuity Prep students have 33 percent more learning time than students who attend schools with a traditional daily schedule and calendar. Students learn in a variety of instructional groups, which range in size from whole group to small group. Small-group rotations include both in-person instruction and independent practice using online, adaptive learning programs. Because of Ingenuity Prep's efficient schedule, students have time each day for a civic leadership class that focuses on social and emotional learning. Students also earn "free choice" time during the day, during which they can select from a variety of different learning centers.

Talent @ Ingenuity Prep

Ingenuity Prep's career ladder allows teachers to develop professionally and take on more responsibilities as they grow—without having to leave the classroom. Aaron Cuny, cofounder and head of school, explained that the "burden of the highest-leverage instruction is on the most effective teachers." Thus, the career ladder's rungs include master, lead, associate, and resident teachers.

- **Master teachers,** who have deep content knowledge and instructional expertise, develop and oversee the curriculum, participate in schoolwide decisions and policies, and develop junior teachers.
- **Lead teachers** are also experienced educators and assist with both planning and implementing curriculum and instruction.
- **Associate teachers** are typically new to the profession and may be part of alternative teaching certification programs such as Teach For America or DC Teaching Fellows. They deliver a portion of instruction and receive mentoring and support from the master teacher.
- **Resident teachers** are hired through a partnership with the Urban Teacher Center and are typically college graduates without formal training or experience as a teacher. They also receive mentoring and support from the master teacher.

Because master teachers have several years with the same junior team teachers, they can scaffold professional development so that new teachers gradually take on more responsibility as they are ready.

Technology @ Ingenuity Prep

Ingenuity Prep uses programs ST Math, RAZKids, and Lexia to practice math and reading skills independently and develop the ability to self-direct. Teachers track student data using Northwest Evaluation Association's Measures of Academic Progress, a computer adaptive assessment tool. Students and teachers use a combination of iPads and Chromebooks to access these programs, as different programs need different operating systems.

Crucial autonomies

Because Ingenuity Prep has the **freedom to schedule student and teacher time** across the school day and year, students and teachers can more efficiently cover core content and have 300 minutes each week left to spend learning about civic leadership. Scheduling freedom also gives teachers planned collaboration and development time, which is crucial both for the team-based instructional model and for job-embedded professional development.

Additionally, **freedom from the roles and pay that typical salary schedules prescribe** allows Ingenuity Prep to have a range of instructional roles, each of which plays a crucial part in the school model. Further, explained Cuny, the school has the freedom to intentionally move away from paying teachers based on years of experience, instead linking compensation to their level of responsibility.

Finally, Cuny says that the **freedom to develop a strong school culture** around civic leadership has been extremely important for Ingenuity Prep's success. "So much of what the next generation community and school reform work in general focuses on is structure and design models, but ultimately what I actually believe lies at the foundation of a successful school is culture," he said.

SUMMIT PUBLIC SCHOOLS

Location: San Francisco Bay Area, California
Opened first school in: 2003

2014–15 Demographics:

- 42 percent eligible for free or reduced-price lunch
- 12 percent special education
- 12 percent English language learners
- 2 percent black
- 58 percent Hispanic
- 21 percent white
- 13 percent Asian

Total enrollment: 2,000 students in seven schools

The model

Summit Public Schools first considered shifting to a next generation approach when the first Summit alumni who graduated from college were able to share reflections on their college readiness levels. Many indicated that, despite the extremely rigorous preparation they received at Summit, they still struggled with learning gaps from their elementary and middle school years and often had to take remedial courses, especially in math. Summit alumni also described an unintended consequence of the highly supportive environment from which they graduated: they did not develop the ability to self-direct and therefore had difficulty managing the many responsibilities of college life. In response, Summit leadership developed a model that would truly personalize each student's experience to fill persisting learning gaps and create an experience that gave students the chance to practice and model the self-directed skills that are critical for college and career success.

Summit partnered with Khan Academy to pilot the first version of their model when opening two high schools in 2011. The model was only used for math instruction with 200 9th-grade students. When all students in the pilot showed growth that year, Summit leadership knew they were on to something. The following year, they expanded the number of students in the math pilot to 400 and designed a whole-school model that included all subjects. All Summit schools adopted the whole-school model in 2013.

Time @ Summit

Students at Summit divide their time among several different learning experiences.

- **Project time** typically takes two-thirds of the school day and consists of robust, teacher-facilitated, project-based learning experiences. Projects are often interdisciplinary and focus primarily on cognitive skills development. Project time includes both collaborative and individual activities.
- **Personalized learning time** focuses on content mastery. Students use "playlists" of diverse resources for each topic, so they have the freedom to select the type of experience that helps them learn best. In addition to using digital content to work independently, students may go to faculty workshops or a one-on-one "tutoring bar" for targeted coaching.
- **Summit Solves and Summit Reads** are periods of focused time for developing numeracy skills via both digital and in-person instruction.
- **Mentoring time** each week gives students the chance to work individually with their faculty mentors to set and monitor both immediate and long-term goals.

Talent @ Summit

Teachers at Summit serve in three roles—teacher, leader, and mentor. They meet weekly with peers in both course-level and grade-level teams to discuss curriculum, teaching practices, and individual students' specific needs, and they take on leadership roles within those teams according to their particular expertise. They also have time each week to collaborate with teachers at other Summit schools and discuss projects and instructional practices.

Teachers also are assigned a group of students and their families to mentor. In addition to meeting with each student individually once a week, they build community by meeting with their mentor group of students daily. In the mentor capacity, teachers offer support regarding college applications, academic goals, and developing skills necessary for success after graduation.

Technology @ Summit

Summit uses a variety of technological tools to support personalized instruction. All students have a Chromebook through which they access a variety of digital content, including Curriculet for literacy and Khan Academy for math. Summit also partnered with Illuminate Education and the Girard Family Foundation to create Activate Instruction, a platform that gives students access to "playlists," which include both instructional resources and assessment tools for all content areas. Finally, Summit developed its own Personalized Learning Plan tool (PLP). The PLP includes a dashboard that displays information on all projects and their associated content areas so teachers can observe where students are and students can independently track their own progress and understand what ground they need to cover to reach their learning goals. Teacher mentors and students also use the PLP to track progress toward personal growth and college-going goals.

Crucial autonomies

Freedom from scheduling constraints allows students at Summit to move fluidly between different learning experiences and gives teachers the space they need to adjust instruction according to student need.

Because Summit is **not bound to teacher roles defined in a salary schedule,** teachers can take on specific roles within their course-level teams and spend school time in a mentoring capacity, which allows them to better personalize instruction for students.

The **freedom to innovate** allowed Summit Public Schools leadership to pilot a next generation approach in response to student needs, and it offered the space to expand and refine the model over time.

CHALLENGES

While the charter landscape provides next generation models with several essential autonomies, these models still face certain challenges.

Some states' seat time and line of sight rules extend to public charter schools. In California, for example, if students spend less than the state-mandated period of time in a course, the course may be classified as an "independent study." Independent study courses translate to less per-pupil funding,[37] which could undermine next generation models' financial sustainability.

Most states' assessments and accountability systems are premised on students staying in one grade level all year. This premise does not align with many next generation models, which deliver content to students based on mastery instead of age or grade level. Thus, students must take grade-level assessments based on their age or years spent in school, even if they have spent the school year working on content that is typically covered in lower or higher grades.

Strong leadership talent is difficult to find. As educators think about expanding models, they cannot always find the strong leadership talent they need to grow school culture and develop new teachers. For example, Ingenuity Prep recently engaged in a national search to fill two leadership positions. School leaders made a strong internal promotion for one of the positions but, despite a national search, were unable to find a candidate for the second position who met the school's benchmarks for instructional leadership and content-area expertise.

Because most public charter schools do not receive equitable funding,[38] they operate with less public funding per pupil than traditional schools, which can mean tough budget decisions. Many next generation public charter schools have responded to this challenge with creativity. For example, Jon Bacal of Venture Academy explained that the leadership team there accepts the policy conditions and is committed to significant compensation for great teachers, incentivizing them to stay. So far, student-directed learning has made that possible. "There is a fiscal imperative to do the right thing for students," he said. "We believe the right thing is for students to take charge of their learning."[39] At the same time, school leaders say they could do more if they had access to the same per-pupil funding as their district peers.

Schools need an "aggregator" to pull data from several separate digital programs into a user-friendly dashboard. Having aggregated data would allow students to more quickly and easily get a snapshot of their progress, rather than assessing progress separately for each program or content area. While more established models have designed such dashboards, new, smaller next generation models currently do not have the funding or manpower to develop their own. Help for these schools could take the form of software designed to accomplish this purpose or more full-service "model providers" like the nonprofit New Classrooms, which offers schools a comprehensive set of digital resources that flow into data dashboards.

RECOMMENDATIONS

Public charter schools hold the potential to provide a flexible, autonomous environment for next generation learning models to thrive. But there are several things state policymakers, philanthropies, and charter school authorizers can do to ensure that these models have the autonomies—and support—they need.

State policymakers can:

- **Lift seat-time, class-size, and other scheduling requirements** for public charter schools so next generation learning models have the scheduling flexibility they need to personalize student learning;
- **Enable public charter schools to staff their schools in ways that meet their students' needs,** which requires the freedom to engage high-quality paraprofessionals to support teachers by supervising students for limited portions of the school day, to hire teachers with cross-disciplinary expertise, and to pay teachers for taking on more responsibility; and
- **Ensure that public charter schools receive equitable, flexible funding that reflects student needs** so next generation models can invest in the staff and technology that best support personalized student learning.

Charter-supporting funders can:

- **Invest in the incubation** of new next generation public charter schools so school leaders can design models that best serve their target student populations;
- **Invest in programs that develop leadership capacity** so next generation models have a pool of high-caliber leaders from which to recruit; and
- **Support initiatives to develop and test new technology,** including data aggregation software, so next generation models can stay on the cutting edge of available tools. This support should also include investing in model providers that can offer schools a comprehensive set of services so that schools do not have to reinvent the wheel.

Charter school authorizers can:

- **Hold next generation public charter schools accountable using a variety of measures** so great schools get credit for educating students with excellence and models that do not serve students well cannot continue to operate;

- **Innovate in measurement and accountability** by, for example, experimenting with performance measures focused on competency-based progression instead of just age-based end-of-year tests; and
- **Minimize reporting requirements and other restrictions** so schools can focus on their core mission—offering students a personalized learning experience so that they can reach their potential.

The charter movement is already a hotbed of innovation in next generation school models. With these actions by policymakers, funders, and charter school authorizers, the sector would be poised to create even more path-breaking models that set a new standard for excellence in boosting student learning.

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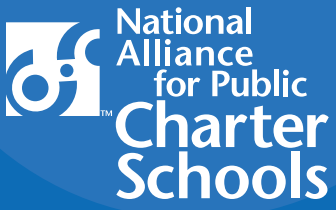

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