Personalized Learning at Scale

Case Studies of Leading Cities

Leaders of urban school systems are faced with a daunting fact: some individual schools are achieving incredible results for students from low-income communities, but no urban school systems are achieving those results for all—or even most—children in an entire city. For generations, students in urban America have been underserved, with few achieving basic proficiency in reading and math, and even fewer completing college. At the same time, technology has been transforming industry after industry, changing the way we consume media, go shopping, and do business. With 21st century tools available, why should our students be stuck in a 19th century designed school system? We tell the story of ten cities in the case studies below, with a focus on how technology and great teaching, with the right system-level conditions, can personalize learning for all students and drive sustained achievement growth.

In our context, personalized learning means that students’ experiences—what they learn, and how, when, and where they learn it—are tailored to their individual needs, skills, and interests, and enable them to take ownership of their education. Early personalized learning work has generated significant interest and promising proof points in district, charter, and private schools alike. However, there has yet to be high-quality implementation at scale—across an entire system of schools or an entire city.

Why is scale important? The benefits of personalized learning are amplified when a system—a school district or a broader city ecosystem—creates the conditions for personalized learning to thrive system-wide, instead of in one-off pilots or individual schools. However, to take high-quality personalized learning to scale, systems will need to address thorny issues in public policy, educator practice, staffing structures, accountability, technology infrastructure, and funding.

To accelerate the pace of innovation at scale, ten medium to large public school systems received funding to develop a system-wide personalized learning strategy. To reach this ambitious goal, systems were challenged to design, launch, and replicate schools that implement personalized learning in a holistic manner, and to overhaul supporting district and city functions (e.g., human capital and facilities) so that they fully support the redesigned schools. Ongoing support for some of these sites is being provided by CEE-Trust and Next Generation Learning Challenges (www.nextgenlearning.org).

We have drafted profiles of these leading cities, telling the stories of how they have dealt with their thorny issues, and where they are having successes and setbacks. We hope that these profiles help urban school system leaders around the country better understand how they, too, could approach system-wide innovation of personalized learning.

### COMPONENTS OF PERSONALIZED LEARNING

| High Expectations for College Readiness | 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 where they are at and supporting their growth from that point. As a result, students master academic content and skills at accelerated rates. This includes at least 1.5 years of growth in Math and ELA each year.  
| College Readiness: At least 80% of students will meet or exceed college readiness benchmarks by age 18 |
| Personalized Learning for All Students | Learning experiences for all students are tailored to their individual developmental needs, skills and interest. Personalized learning includes the following elements:  
| Learner profiles, capturing multi-faceted inputs (skills, interests, aspirations) about each student.  
| Personal learning paths, enabling students to tailor experiences to their own needs and goals.  
| Individual mastery, assessing progress against standards and goals and advancing students at their own pace.  
| Flexible learning environments, offering multiple instructional delivery approaches |
| Optimized for Scale | 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 |

We are eager to share the work of these trailblazing districts with you. We invite you to learn more, to celebrate the successful efforts already underway, and to support the challenging work still ahead.
## Harbormaster-led Systems

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| **CityBridge Foundation (Washington, D.C.)**     | - 217 schools               | - Pilot funding for district and charter schools launching innovative models that embrace technology  
- Design workshops, summer institute, and tailored support for school applicants  
- Seven design principles for breakthrough schools, including mastery-based credit and scalability | 2Revolutions                                                                                 |
|                                                  | - 82,958 students           |                                                                                                                                                |                                                                                               |
|                                                  | - 76% FRL                   |                                                                                                                                                |                                                                                               |
| **Colorado Education Initiative (CO)**           | - 112 schools               | - Participating districts’ different personalized learning approaches become proof points for other Colorado districts  
- State-level policy environment supportive of personalized learning (enabled by the Colorado DOE)  
- Cross-district learning to more rapidly achieve district- and state-wide scale of next gen models | Adams County School District  
- Colorado Department of Education  
- Colorado Springs School District 11  
- Thompson School District                                                                 |
|                                                  | - 55K students              |                                                                                                                                                |                                                                                               |
|                                                  | - 40-80% FRL                |                                                                                                                                                |                                                                                               |
| **LEAP Innovations (Chicago)**                   | - 658 schools               | - Access to the Collaboratory—a space designed to bring educators, entrepreneurs, tech companies, researchers and students together to share ideas, co-develop solutions, and get training.  
- Summer Design Program for school teams that includes workshops, one-on-one consultations, site visits, apprenticeships, and peer-to-peer learning opportunities  
- Freely available personalized learning resources, including design roadmaps, design workshop materials, and design readings and videos. | Chicago Public Education Fund  
- Chicago Public Schools                                                                 |
|                                                  | - 400K students             |                                                                                                                                                |                                                                                               |
|                                                  | - 85% FRL                   |                                                                                                                                                |                                                                                               |
| **New England Secondary Schools Consortium**     | - 75 schools                | - Focus on policy and practice across the five-state region: competency-based learning models and graduation requirements supported by state DOEs  
- Alignment with international best practices for secondary learning as a proxy for readiness  
- Intensive personalized supports for schools through Great Schools Partnership’ on-site coaching model | Great Schools Partnership  
- Connecticut Department of Education  
- Maine Department of Education  
- New Hampshire Department of Education  
- Rhode Island Department of Education  
- Vermont Agency of Education  
- Connecticut Association of Public School Superintendents  
- Nellie Mae Education Foundation                                    |
|                                                  | - 57K students              |                                                                                                                                                |                                                                                               |
|                                                  | - 48% FRL                   |                                                                                                                                                |                                                                                               |
| **New Schools for New Orleans**                  | - 90 schools                | - Collaboration of school districts and school support organizations, led by reform leader NSNO  
- Focus on the local ecosystem: communities of practice, human capital systems, data systems  
- Transition local CMOs to personalized learning and launch new schools by supporting entrepreneurs | 4.0 Schools  
- Educate Now!  
- Orleans Parish School Board  
- Recovery School District                                                                 |
|                                                  | - 43K students              |                                                                                                                                                |                                                                                               |
|                                                  | - 77% FRL                   |                                                                                                                                                |                                                                                               |
| **Rogers Family Foundation**                     | - 124 schools               | - Strategic partnership with Oakland USD, local CMOs, nonprofits, and other funders committed to education reform in Oakland  
- Access to talent, experience, and lessons learned from local blended pilots  
- Deep discovery phase open to all schools, personalizing their own learning about NextGen schooling | Oakland USD and the Oakland Public Education Fund                                           |
|                                                  | - 49K students              |                                                                                                                                                |                                                                                               |
|                                                  | - 71% FRL                   |                                                                                                                                                |                                                                                               |
DISTRICT SNAPSHOT (2013-14)

Type: Urban

Size (3rd largest in U.S.)
- K-12 schools: 658
- Students: 400,500
- Teachers: 22,500

Demographics
- White: 9%
- African-American: 40%
- Latino/Hispanic: 45%
- Asian/Pacific Islander: 4%
- Multiracial/other: 2%

Free/reduced lunch eligibility: 85%
Graduation rate: 65.4%
Per-pupil spend: $7,400–$8,700

LEAP Innovations, Chicago, IL

VISION

LEAP Innovations and its partners embrace personalized learning as the guiding principle to support rigorous, powerful instruction for every student. Personalized learning both relies on and enables great teachers, by making their work of differentiating instruction both easier and more effective. In a personalized learning environment, students collaborate with teachers to develop their own individualized learning path, are given opportunities and resources to push beyond mastery of individual skills, and are empowered to learn in a way that maximizes their limitless potential.

CALL TO ACTION: We need a new model of education that better prepares the next generation of Americans and ensures our nation’s future competitiveness. Although important work in education reform has produced advances in the recent years, it will not be enough to keep America competitive. For example, the U.S. high school graduation rate went up to 80 percent in 2013 from 75 percent five years before, but scores in reading and math for 12th graders have not changed at all. Indeed, of the 4 million American children born this year, just a third will earn a college degree. And less than half of American workers will be qualified for 21st century jobs by 2030.

Personalized learning supported by adaptive technologies creates an entirely new learning model that can meet the needs of students and teachers in ways not possible before. It has the potential to transform classrooms, enabling anytime, anywhere learning and taking into account each student’s needs, skills, and interests to tailor lessons that increase the likelihood of each student’s success. The catch is, little is known about which products and practices are best, and school designers and educators are often on their own to develop and implement personalized learning schools. LEAP Innovations is a Chicago-based R&D hub that searches globally to identify the best education technology products and practices, and pilot them in schools and other real-life learning environments. LEAP’s aim is to quickly scale what works to help educators personalize learning for each student, dramatically improving outcomes for learners from pre-K to early college. LEAP plans to breakdown the silos separating rapid innovation in the tech sector from the real-world needs of teachers and learners.

KEY REGIONAL PARTNERS: The Breakthrough Schools: Chicago initiative is made up of organizations committed to personalizing learning including:

- Leap Innovations: The initiative is spearheaded by LEAP Innovations (LEAP), a recently formed R&D hub for education innovation. LEAP’s team brings experience in education reform, technology innovation, start-ups, and education research and evaluation. The organization is well positioned to serve the needs of the schools, technology companies, and other key stakeholders. As the programmatic leader of Breakthrough Schools: Chicago, LEAP manages the recruitment and selection of schools, program design and implementation, and oversees expert consultants and coaches.
- Chicago Schools: CPS works alongside LEAP and other local schools to foster ideal conditions for 21st Century Schools. Through a cross-functional personalized learning task force led by the CPS Chief Operating Officer, the District is committed to developing a blueprint for personalized learning for

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FOR MORE INFORMATION:
WWW.LEAPINNOVATIONS.ORG

Funded by: Bill & Melinda Gates Foundation
all students in Chicago. In addition, Chicago’s charter schools and Archdiocese Schools work together with traditional District schools to help pilot new products in the LEAP Pilot Network and learn about new practices in the LEAP Collaboratory.

- **Chicago Public Education Fund**: The Fund led some of the work to introduce schools to innovative models and practices, including leading groups of educators through a rigorous Summer Design Program. A **Breakthrough Schools: Chicago Advisory Group**, comprised of LEAP, The Chicago Public Education Fund, Chicago Public Schools (CPS) Office of Teaching and Learning, CPS Office of Incubation and Innovation, and NGLC will provide overall leadership and contribute to the school and grant selection processes and help to champion efforts.

**DESIGNED OUTCOMES**: LEAP aims to propel the nation’s third largest school district toward a critical mass of powerful, next-generation schools, disseminating best practices so all students are prepared to succeed with 21st century skills. Chicago students will have access to a more personalized and effective learning experience, resulting in better outcomes from early childhood to early college. LEAP will measure outcomes based on student academic growth using nationally normed assessments.

**STRATEGIES**: LEAP is building the ecosystem necessary to advance personalized learning through several key initiatives:

- **The Collaboratory**: LEAP has established a physical space for innovation by bringing educators, entrepreneurs, tech companies, researchers and students together to share ideas, co-develop solutions, and get training. Educators will have access to high-quality professional development on how to personalize learning and how to effectively integrate technology into their classrooms.

- **The Pilot Network**: LEAP will look globally to identify the best solutions for key learning gaps and then pilot identified edtech tools in real-life learning situations. LEAP will evaluate what works using research based on national standards, and then scale the best solutions broadly from early childhood to college.

- **21st Century Schools**: LEAP will foster new, next-generation school models, beginning with **Breakthrough Schools: Chicago**, a local-national partnership made possible through NGLC. National funding was made possible primarily by The Eli and Edythe Broad Foundation and the Bill and Melinda Gates Foundation.

**KEY LEARNING FROM THE BREAKTHROUGH SCHOOLS: CHICAGO FIRST YEAR**: During the 2013-2014 school year, Chicago was one of two cities (the other was Washington, DC) selected to try a new concept for NGLC. The idea was to hold a regional competition for NGLC support of next-generation school models and create a cadre of great new schools in one area.

LEAP led 11 Chicago school teams through a comprehensive, 10-week design process. Seven of these teams were awarded $700,000 total from NGLC to implement personalized learning practices in their schools. The winners included schools that will open for the 2014-2015 school year, as well as existing traditional public schools, charters, magnets, and one AUSL campus. Although their models may differ, they all share a clear vision of next-generation, personalized teaching and learning in which each student is engaged and empowered to take charge of their own learning, while each educator can access robust data to pinpoint student needs, allowing them to agilely accelerate or remediate students. The result: a set of new next-generation schools in some of the most challenged Chicago communities.

LEAP and partners have learned several key lessons from the first year (called the “Pilot Cycle”), which will be thoughtfully applied to the next cycle:

- **Sufficient time and resources are needed to create high-quality designs and infrastructure.** A longer timeline will help create programming for school leaders, including more direct hands-on experiences, non-local school visits, and mini-apprenticeships at model schools.

- **A diverse range of schools—charter, traditional, magnet, IB, and others—working together adds meaningful perspectives and fosters collaboration.** During the Pilot Cycle, educators benefitted from the insights of fellow educators from different grade bands, different school types, and different parts of the city. LEAP plans to engage an even wider range of educators during Cycle One.

- **In-person, local supports help build community.** One-on-one consultations with subject-matter experts helped teams dive deeper with their individual priorities. Understanding the local context, at the district and school level, proved critical to fostering successful creations and school re-designs. In Cycle One, the LEAP plans to expand on these consultations by offering individualized, dedicated coaches to teams.

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Highlights of the innovative, blended, personalized learning models who received the first round of Breakthrough Schools grants in Chicago include:

- **Wildwood World Magnet**: This magnet IB school helps bring new meaning to student ownership of learning by requiring each student to develop their own transdisciplinary curricula as the backbone of the year’s learning. Each individual unit produced will require a creative product to demonstrate new learning, use of digital media to record and assess student’s progress meeting Common Core standards, and facilitation of meaningful discussion among and between teachers and peers.

- **CICS West Belden**: This charter school redesign effort will transform West Belden into a fully blended, personalize learning model. Students will progress through their individualized learning plan during three-hour rotational labs, where they will learn through digital and adaptive programs, collaborate with peers, and participate in individual tutoring sessions and small-group instruction.

The Work Continues: LEAP will build on the success and momentum of the Breakthrough Schools Chicago Pilot Cycle with Cycle One, where they will work with 15 more schools to design whole-school models. During the upcoming cycle, LEAP and partners will provide workshops, one-on-one consultations, local and national site visits, apprenticeships, and peer-to-peer learning opportunities for the seven school teams. This cycle of work has a longer timeline, which allows LEAP to plan, recruit, and incubate design teams. The goal of this cycle is to help teams design breakthrough learning models with the potential to radically improve student outcomes.

### Program

1. **Initial Engagement and Exposure**
   A variety of organizations enabled teachers and principals to participate in **events, site visits, and workshops** to gain exposure to innovative models and practices.

2. **Small-scale Innovations**
   The **Summer Design Program** enables teams to identify challenges, design solutions and implement small-scale innovations.

3. **Whole-school Design (current)**
   **Breakthrough Schools Chicago** engages schools in a series of workshops and provides coaching; schools design whole-school personalized learning models.

4. **Planning**
   **Schools with the strongest proposals and highest level of readiness will receive planning grants.**

LEAP will continue working directly with the Chicago Public Schools and other local schools to foster ideal conditions for personalized learning. LEAP and partners will create awareness of, interest in, and capacity for personalized learning throughout Chicago.