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

Erin Mote and Eric Tucker, Co-Founders, Brooklyn Lab

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

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

LAB is designed to educate high-need urban students and to make the learning experience fun.

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

Entrepreneurial Learning: LAB fosters interest-driven learning and instills a sense of awe and curiosity in the face of challenges. It supports academic learning as well as social and emotional needs like mindfulness, persistence, and grit. Students work daily with designers and entrepreneurs in the 360Lab on activities such as robotics, coding, and game design. 360Lab’s multi-age, challenge-based activities foster key career skills and allow students to discover their passions.

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

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

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

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

MODEL TOOLBOX:
Learning Management System, Student Information System and Gradebook:
Cortex
Assessment Tools and Approaches:
Cortex, Literacy Generation, CoreSpring, Schoolzilla, NWEA MAP
Implementation Partner:
InnovateEDU
Digital Content Providers:
ST MATH, Zearn, Cortex, Catalyst Literacy, Play Power Labs, LearnZillion, Learning Registry Index, BrainPOP Game Up, Scratch, Duolingo
Hardware: Chromebooks
pace. As students complete activities, embedded assessments give real-time feedback and badges. Students, teachers, tutors, and parents access dynamic, validated, actionable feedback about students' performance, skills mastery, and growth in Cortex.

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

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

**The Organizational Model:** LAB is co-located with InnovateEDU, a non-profit which brings together uncommon allies in education from entrepreneurs to designers to develop K-12 digital tools to serve, inform, and enhance teaching and learning. InnovateEDU is working to develop the open source digital platform Cortex, in partnership with Design Innovation Factory as well as LAB and other next generation schools.

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

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

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

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

**FOR MORE INFORMATION:**

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

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