LABORATORY SCHOOLS
How School Communities Can Power Human-Centered Design and Inclusive Innovation

EQUITY BY DESIGN

MARCH 25, 2021

INTRODUCTION

The COVID-19 pandemic has ignited the transformation of American education. Almost overnight, the country became a test bed as schools experimented with new ways to deliver education to our nation's 53 million K-12 students. One year in, it's clear that our shared response to the pandemic has had both bright spots and challenges. Ultimately, the pandemic has exacerbated our education system's existing inequities.

Despite the admirable efforts of many educators and school administrators, these experiments have failed many students—particularly students who are low-income; Black, Indigenous, and people of color (BIPOC); learning English; or living with a disability. That's because most of our nation's schools lack the infrastructure for piloting solutions; there's no shared working framework for individual public schools to develop, modify, iterate upon, and validate solutions to pressing challenges. Rather, improvements in traditional education are mediated through slow-moving systems and blunt instruments.

Moreover, most investment in education research and development (R&D) is concentrated in later-stage functions like randomized experimentation and validation, which happen outside of the K–12 school setting, so it can take years before the most significant developments in learning sciences and design are applied in classrooms. R&D methodologies that are removed from real classrooms often lack the insights and lived experiences of the people within school communities.

During the pandemic, American public schools have not had the luxury of waiting for solutions that meet the needs of their students, families, and staff. They needed immediate evidence-based solutions to immediate challenges, and they still do.

Laboratory schools, including ours, have stepped in to build research-backed solutions. These schools, which comprise a small but robust network, are designed specifically to innovate and diversify educational practices and policies. During the pandemic, laboratory schools have served as centers of applied education R&D that are embedded within—and shaped by—local communities. They demonstrate the essential role individual school communities can play in designing and adapting solutions to education's systemic challenges.

But to expand this impact, our country must deepen its investment in laboratory schools and their approaches.

CONTENTS

IMPACT HIGHLIGHTS

See how solutions developed in a lab school can have impact far beyond its own community.

Please note that an archive of all resources referenced in this document can be accessed at http://equitybydesign.org/human-centered-design.

The purpose of this guide is twofold: First, we aim to increase awareness of the potential role of laboratory schools in reimagining the future of education. Second, we aim to give educators the tools they need to apply the practices of laboratory schools, which we hope will deliver the benefits of these approaches to more school communities.

In pulling insights from our experience as a laboratory school, Brooklyn LAB has created a suite of actionable resources that any motivated school can use to generate and modify relevant, evidence-based solutions to longstanding problems in education that have been amplified by the pandemic.

The specific strategies and broader conceptual recommendations described here can help schools equitably engage students, families, educators, and experts to ensure that solutions meet real needs. This guide offers numerous examples, but it does not aim to be prescriptive, nor do the insights highlighted aim to be exhaustive. Rather, as schools explore a laboratory school approach to problem-solving, we invite them to regularly reference and return to this guide as they adapt certain high-leverage strategies to meet the unique needs of their communities.

Additionally, this guide is designed to be a resource for those working to build standing infrastructure for applied education R&D, including federal policymakers, researchers, and philanthropists, as they consider how to best advance actionable knowledge within the U.S. educational landscape. We hope these stakeholders use this guide to deepen their understanding of the laboratory school approach to creative problem-solving and the great potential it has to help promote necessary, systemwide improvements.

We are excited to share the work led by Brooklyn LAB through the EquityByDesign.org initiative, and hope others are encouraged to try these approaches during the pandemic and into the future.

LAB SCHOOL APPROACH

A CALL FOR HUMAN-CENTERED EDUCATION

The laboratory school environment is defined as a school community that brings together a team of students, families, educators, instructional leaders, researchers, and designers to support directed R&D and generate innovative solutions to pressing challenges. Together, laboratory school communities intentionally examine problems of practice and develop potential solutions, drawing on existing R&D. Laboratory school community members share a mindset that advanced research provides opportunities for professional learning and student success.

We propose systematic investments in highly competitive laboratory school programs that encourage school communities to engage in applied R&D and high-tech innovation. Laboratory schools should be one component of a standing R&D infrastructure, with the specific aim to better:

+ *meet current and future national R&D needs;*

+ *stimulate the development of innovative technological solutions;*

+ *foster and facilitate the participation and leadership of BIPOC educators, families, students, and administrators; and*

+ *increase the private-sector commercialization of solutions that emerge from school contexts by enhancing the relevance and applicability of such solutions.*

EQUITY BY DESIGN

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The laboratory school approach builds upon a proud history of efforts to foster innovation through engaging families, students, educators, instructional leaders, and partners in learner-centered design. The XQ Institute, Next Generation Learning Challenges, NewSchools Venture Fund, Charter School Growth Fund, and the Digital Promise League of Innovative Schools have partnered with Brooklyn Lab to advance problem articulation and solution design for some of education's most pressing challenges. This approach represents a critical building block for reflecting the lived-experience of learners and school communities and thus increasing the impact of education solution development.

Laboratory schools will power discoveries, technological innovation, and the capacity to develop and refine ideas into deployable concepts, solutions, and systems. They can provide a fact-based foundation for discussions about the utility and need for emerging solutions.

RESOURCES

🔗 "Designing a Process for Inclusive Innovation: A Radical Commitment to Equity" (Digital Promise)

🔗 "To Reopen, America Needs Laboratory Schools" (Getting Smart)
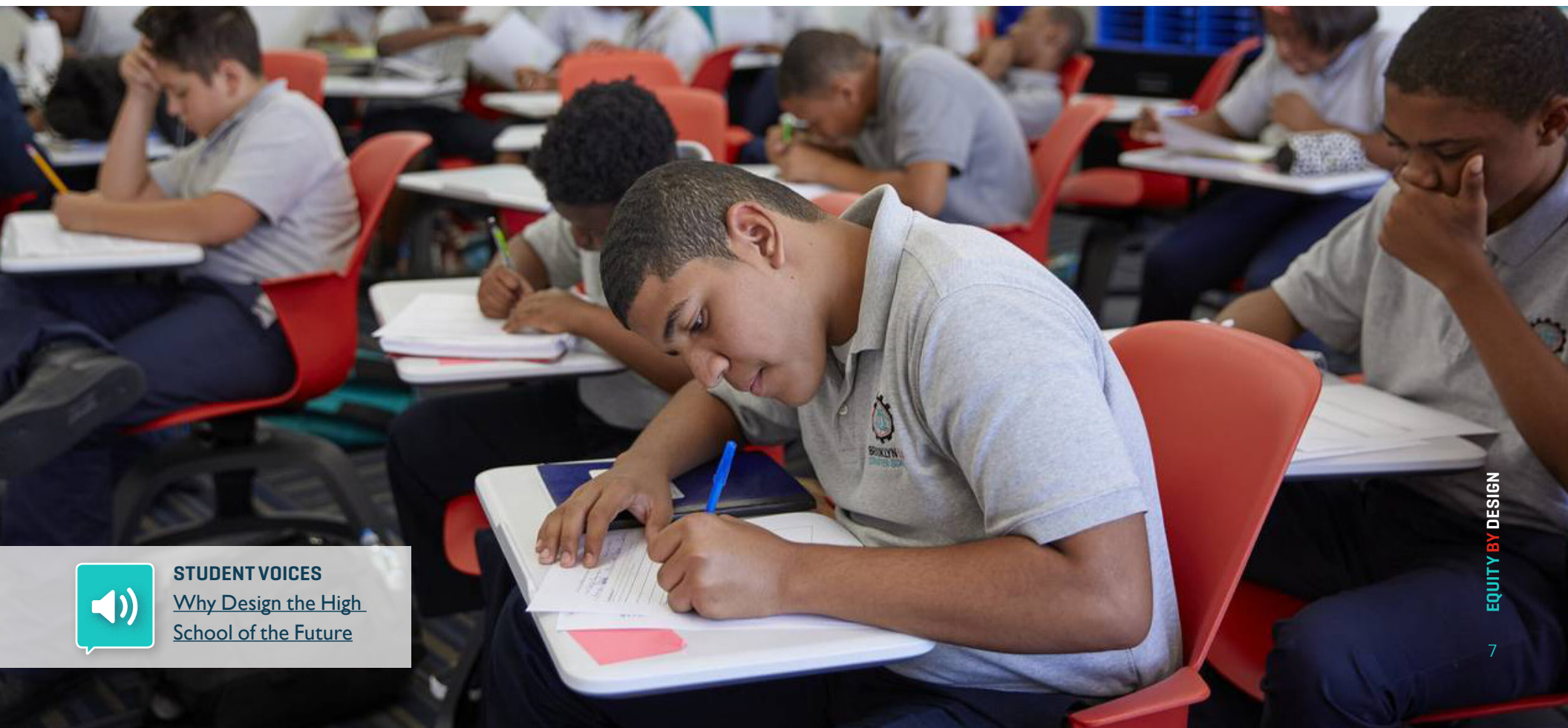
STUDENT VOICES
Why Design the High School of the Future

TEACHERS

ADMINISTRATORS

STUDENTS

FAMILIES

LAB SCHOOLS

INCLUSIVE DESIGNERS

RESEARCH & DESIGN

LEARNING SCIENTISTS

TECHNOLOGISTS & ENTREPRENEURS

Laboratory schools bring together teams of students, families, educators, instructional leaders, researchers, and designers to support directed R&D and generate innovative solutions to pressing challenges.

BENEFITS OF THE LABORATORY SCHOOL APPROACH

In the COVID-19 era and beyond, laboratory schools have the potential to generate tremendous value in several ways:

+ *They advance equity. The pandemic has revealed the inequity and variation of people's experiences within our country's educational systems. In contrast to options that fail to account for individual experiences and contexts, laboratory schools set the table for the generation of more nuanced solutions and modifications.*

+ *They embrace innovation and applied experimentation. This can allow for imaginative work that attempts to solve real problems schools face now—while positioning schools for future success.*

+ *They encourage collaboration. Laboratory schools help establish uncommon partnerships across sectors and diverse arenas that benefit both students and society by building and sustaining stronger bridges between schools, civil society, universities, employers, solution providers, and the larger world.*

+ *They foster resilience and adaptability. Nimble and adaptable, laboratory schools serve as an antidote to the slower-moving bureaucracies of education. These schools can speed up the pace of improvement by surfacing the most promising prospective solutions for emerging challenges.*

+ *They generate evidence regarding prospective solutions. By exploring successes and challenges, laboratory schools are creating a body of experience and a qualitative and evidence record that provide a fact-based foundation for discussions about the need for emerging solutions, creating the conditions conducive to advancing actionable knowledge.*

HUMAN-CENTERED DESIGN: A LABORATORY SCHOOL APPROACH

Human-centered design (HCD) is a critical laboratory school approach that any motivated school can use to advance inclusive innovation. While the HCD framework is frequently applied in fields like design and technology, educators at laboratory schools have found HCD principles useful in supporting iterative practices that help drive systemic improvements and innovations in schools.

At its core, the approach insists that school leaders cultivate empathy for students and their families, placing the needs, perspectives, and experiences of affected people at the center of any problem-solving process. In addition to building empathy, key steps in any HCD process include gathering and employing the affected persons' feedback to build and refine prototypes, testing the prototypes, and iterating through the steps to continuously improve the solution.

In many cases, this approach is a departure from traditional school practices that have systematically disadvantaged certain groups. This includes marginalizing students who learn differently, allowing school priorities to be shaped by parents with socioeconomic or race-based privilege, and ignoring or dismissing the needs of people who are non-native English speakers.

As public schools become familiar with laboratory school approaches like HCD, they will grow more agile—able to identify and respond to problems as they arise, rather than after they've become pervasive. This makes for a more resilient organization that will be better prepared to respond to the next unexpected challenge—another pandemic, the impacts of climate change, a

financial downturn, or something else. This also makes students more resilient: When students' thoughts, feelings, and ideas are explicitly valued and included in decision-making, they gain a stronger sense of identity and agency. Subsequently, they are better prepared to navigate a rapidly evolving global society in which uncertainty is the prevailing condition.

During the pandemic in particular, laboratory schools such as ours have used HCD as a framework to develop solutions: We have gathered diverse members of our school community, the public and private sectors, and civil society to develop, refine, and rapidly apply new evidence-based practices, which we have highlighted in this guide.

The practices of laboratory schools have demonstrated success, but at a modest scale. To bring this value to American education more widely, we need greater investment in laboratory school approaches such as HCD.

RESOURCES

🔗 "How We Move Forward: Practicing Three Inclusive, Anti-Racist Mindsets for Reopening Schools" (Getting Smart)

🔗 "It's Time to Prepare for COVID-19 Resurgence: Six Steps Your School Can Take" (Getting Smart)

STUDENT VOICES
Issues and Opportunities in Education

HUMAN-CENTERED DESIGN

APPLYING HCD AND INCLUSIVE INNOVATION DURING THE PANDEMIC: BROOKLYN LAB'S APPROACH

Our work at Brooklyn LAB has taught us vital lessons about how laboratory schools can power HCD and inclusive innovation during the COVID-19 era and beyond. In this section, we outline several high-leverage insights educators, policymakers, and school leaders can adopt as part of a laboratory-school approach to education.

These insights include how to:

+ *Communicate effectively and engage equitably.*
+ *Privilege the needs of individual learners, especially those with disabilities.*
+ *Build student personas to build empathy.*
+ *Enlist success coaches to support learning and socio-emotional needs.*
+ *Prioritize learner identity and agency.*
+ *Cultivate and empower diverse, talented educators.*
+ *Embrace iteration and continuous learning.*

Since our founding in 2013, Brooklyn LAB has prioritized family engagement and feedback from scholars, parents, and educators. Pre-pandemic, much of our engagement work occurred through in-person family nights, family design jams, conferences, and town hall meetings to solicit feedback on school practices and policies.
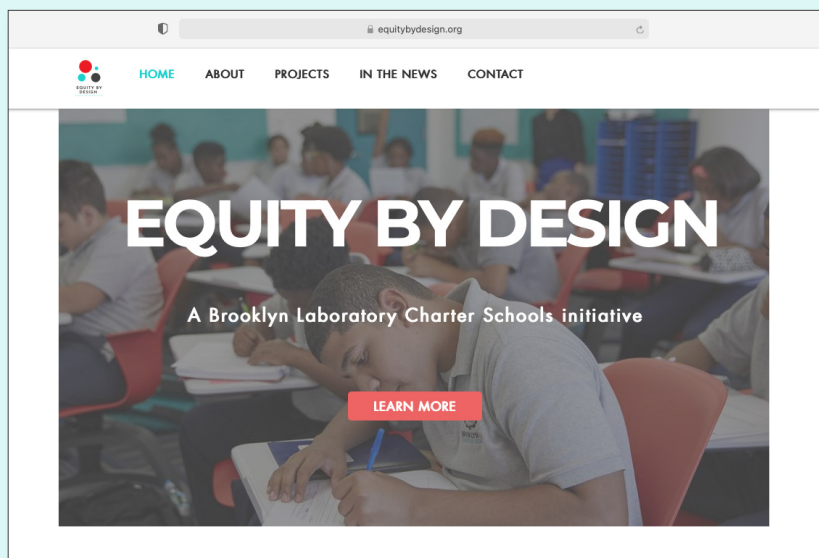
EQUITY BY DESIGN

The arrival of COVID-19 challenged us to transition almost all of our school operations to new or expanded digital formats—from daily instruction and extracurricular events to counseling, special education services, and family engagement. In the process, we were reminded of the critical importance of relationship-building and engagement. Spending the time to get to know our students and their families deeply over the years helped us pivot quickly when the moment called for it—first to a remote-learning format, and later to a meticulously planned in-person learning model that puts health and safety at the forefront while serving our most vulnerable students.

The pandemic was an opportunity to strengthen our engagement efforts and more fully embrace the inclusive innovation and HCD principles we have been using throughout our time as a school. To that end, we focused on three interrelated questions that are aimed at developing Brooklyn LAB's organizational capabilities, and then codified them for use by other laboratory schools:

1 *How can we use HCD to engage and respect BIPOC students and families in directed research?*

2 *How can we engage BIPOC educators and instructional leaders in HCD to support directed research?*

3 *How can we embed learning scientists, experts, and designers in schools to enhance directed research?*

On paper, the process involves gathering diverse perspectives, constraining the timeframe, setting focused goals, encouraging ideation, and prioritizing collaboration. In practice, the Back-to-School Initiative stream of work involved more than 150 meetings between April and September of 2020 to gather insight from industry experts, government officials, architects, urban designers, educators, staff, parents, scholars, and community members. The meetings included a set of intensive working sessions or charettes, in which we invited participants to share their hopes, fears, concerns, and ideas about a safe and effective return to school.

EQUITY BY DESIGN

The outputs from our work on designing solutions for the safe and equitable reopening of schools during COVID-19 can be found on Equitybydesign.org.

Processes and Principles for Navigating Uncertainty and Adapting to Change shares activities and learning from our work on reimagining education in a pandemic.

We then prioritized their feedback as we designed school reopening protocols. We challenged ourselves and participants to allow for vulnerability in these discussions. Some of the key questions we sought to answer were:

+ *What will classrooms look and feel like when they reopen?*
+ *How can we keep students and teachers safe as they enter the building?*
+ *How will we honor scientific and public health guidelines?*

During this months-long endeavor, we estimate that 75 percent of our students' families participated in some way, from engaging in a joint-design session to taking time to provide one-on-one feedback regarding concerns and frustrations. A majority of our community members are people of color, and many parents work in first-responder and essential roles as bus drivers, grocery store workers, nurses, police officers, and firefighters. Our families have endured extraordinary loss and pain throughout the pandemic. To support and encourage them to share their input, while honoring their need to take time to grieve and care for their families, we planned sessions and check-ins at different times of day.

Important documents emerged from this process, including a back-to-school facilities toolkit, a facilities guide, an instructional program scheduling map, a playbook for success coaching, a COVID-19 school communications toolkit, and a guide for creating learning environments that build student identity and agency. These resources, among others, are available publicly at equitybydesign.org.

RESOURCES

🔗 Back to School Facilities Toolkit Video (Equity By Design)

🔗 "Advancing Equity through Innovation: Seven Noteworthy Approaches from Brooklyn LAB" (Getting Smart)

🔗 "This High School is Sharing How to Make Remote Learning Work for Every Student" (XQ)

INSIGHT 1: COMMUNICATE EFFECTIVELY AND ENGAGE EQUITABLY

Communicating effectively and equitably is at the core of everything we do as a school community. However, the COVID-19 pandemic and ongoing systemic challenges like racism and ableism reveal many of the ways schools across the country, including Brooklyn LAB, have fallen short on this promise.

At a virtual town hall in the summer of 2020, we received negative feedback from Brooklyn LAB families, informing us that we had missed the mark in our approach to communicating new health and safety protocols for reopening school. While we had incorporated feedback from parents, staff, students, and experts on technical issues, such as how to arrange furniture for a socially distanced classroom, we had failed to relay what the more human aspects of a safe and healthy return to school would look and feel like, such as enforcement of wearing masks and prioritizing social distancing.

In our ongoing work to improve community engagement, we identified five core principles of what equitable school communications should be:

+ *collaborative;*
+ *empathetic;*
+ *transparent and truthful;*
+ *accessible and inclusive; and*
+ *resilient.*
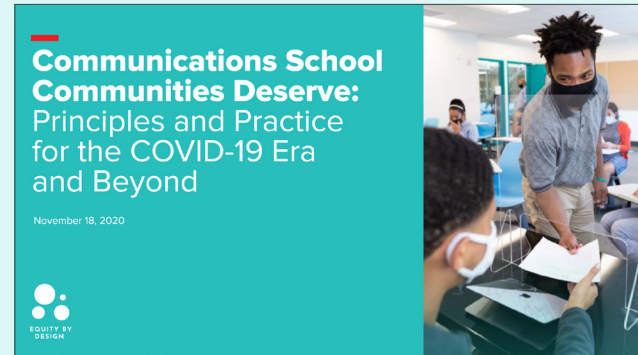

Communications School Communities Deserve outlines principles for equitable communication.
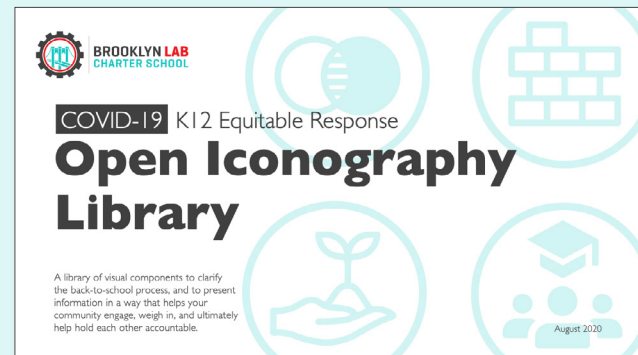
COVID-19 K12 Equitable Response Open Iconography Library provides free icons for communicating plans and expectations clearly.

Safeguarding Back to School: Principles to Guide a Healthy Opening to Classrooms is a webinar offered in collaboration with the American Federation of Teachers (AFT).

We empower school communities to understand and make a plan for COVID-19 vaccination.
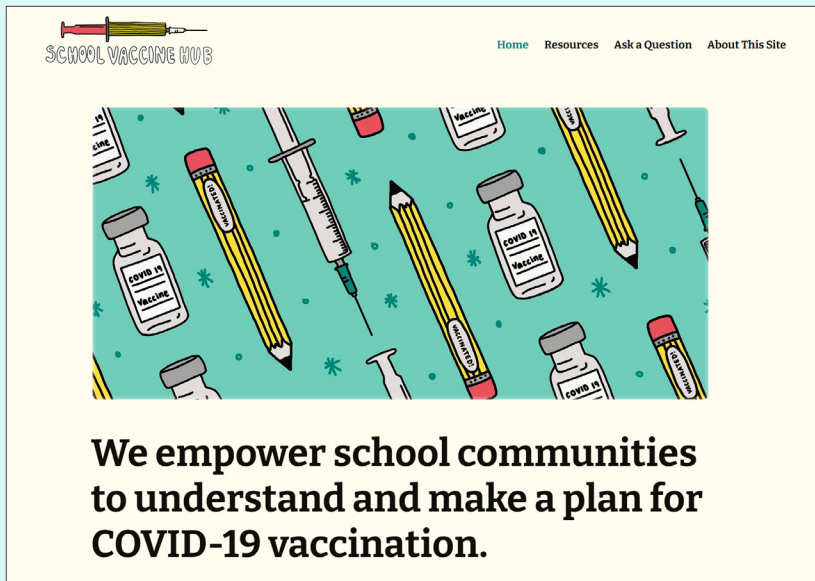
As COVID-19 vaccines become more available to the public, we imagine a future in which schools lead effective local efforts to increase vaccine uptake and address vaccine hesitancy. School Vaccine Hub provides school communities with a central source of information and resources about COVID-19 vaccines from trustworthy medical and public institutions.

How Schools Can Promote Vaccination and Address Hesitancy: A 10-Point Plan that Puts Equity First outlines a critical role for schools in equitably vaccinating the population of the United States.

Here are a few ways schools can put these principles into practice:

+ *Conduct an audit to ensure you're considering perspectives of all people in your communications, including BIPOC individuals and families of students with disabilities.*

+ *Create multiple communications channels and invite participation and questions across all of them, such as webinars, surveys, Facebook Live, Zoom, text, one-on-one phone calls, social media, email, and student-only town halls.*

+ *Regularly hold open forums focused on racism and equity to help understand the experiences of your community; then listen to the hard truths.*

+ *Seek input from experts and invite them to facilitate conversations with families about the latest public health updates, racial injustice, mental health, or other topics of concern to your community.*

+ *Emphasize factual, open-source resources and share links for those who want to learn more.*

RESOURCES

🔗 Engage Equitably (Equity By Design)

🔗 "This School Is Giving Families Meaningful Options as They Reopen. You Should Too." (XQ)

EQUITY-FOCUSED REOPENING

CHALLENGE

How do we prioritize equity for the students who are furthest from opportunity as we reopen schools?
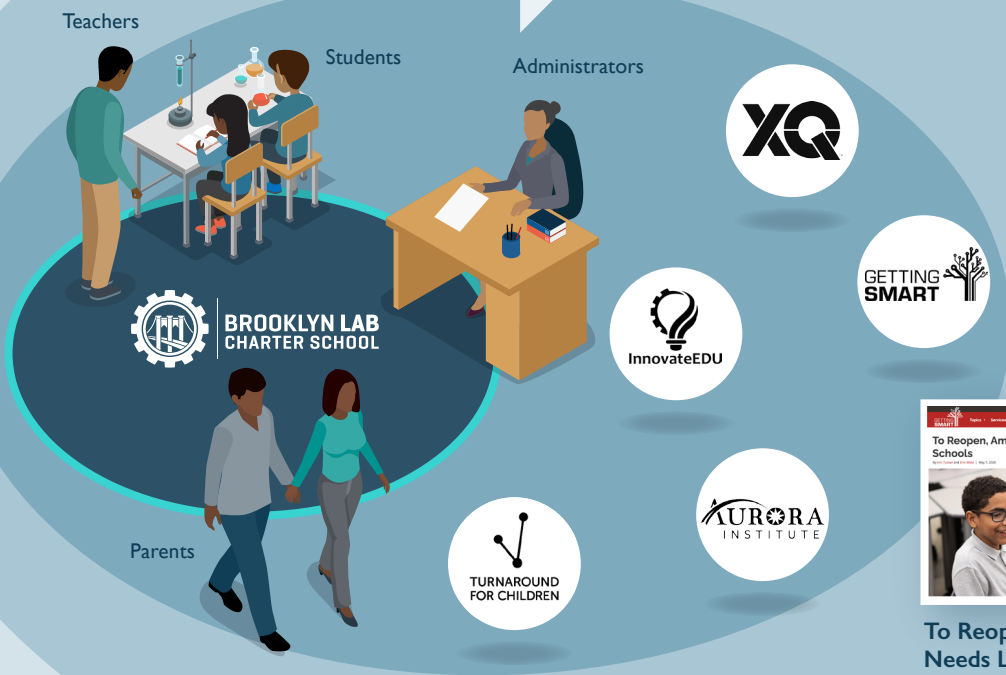
PROCESS

How might educators reimagine and strengthen systems in order to better meet the needs of people of color and individuals with disabilities throughout re-entry? We engaged with students, families, faculty, staff, and experts to identify high-leverage, evidence-based solutions.

SOLUTION

To prepare for reopening in a way that was flexible enough to respond to an uncertain future under COVID-19, yet robust enough to ensure that all students have an equal opportunity, we put together multiple scenarios, accounting for context, conditions, and learning.

BROADER IMPACT

Our laboratory school moved quickly to translate research-backed guidance into practical approaches that influenced state-, regional-, and district-level reopening plans. Here are a few of the plans that integrated and cited our approach.

Teachers

Students

Administrators

BROOKLYN LAB CHARTER SCHOOL

XQ

InnovateEDU

GETTING SMART

Parents

TURNAROUND FOR CHILDREN

AURORA INSTITUTE

How to Reopen Schools: A 10-Point Plan Putting Equity at the Center 🔗

To Reopen, America Needs Laboratory Schools 🔗

nsba Reopening Realities 🔗

mid-atlantic equity CONSORTIUM Reopening Schools During COVID-19: Understanding Possible Models, Stakeholder Needs, and Best Practices to Advance Educational Equity 🔗

RIHSC COVID-19 School Re-opening Resources For Health & Wellness Priorities 🔗
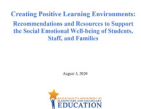
Massachusetts Department of Elementary and Secondary Education Recommendations for Creating Positive Learning Environments 🔗
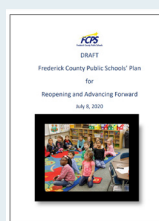
Frederick County Public Schools Plan for Reopening and Advancing Forward 🔗

Maryland State Department of Education Maryland Together: Maryland's Recovery Plan for Education 🔗

INSIGHT 2: PRIVILEGE THE NEEDS OF LEARNERS WITH DISABILITIES

At LAB, 32 percent of our student body has some kind of disability, ranging from mild dyslexia to autism. By designing for the needs of our most complex and vulnerable learners, we have seen how this approach benefits all learners through the academic and social-emotional strides our scholars make year over year.

In the tumultuous early days of the COVID-19 outbreak, school shutdowns prevented some students with disabilities from receiving the special services they rely on. To help provide educators everywhere with tools and resources to meet the needs of students with disabilities during the pandemic, we co-founded the Educating All Learners Alliance, a coalition of disability, civil rights, and online learning organizations committed to sharing resources and building community.

The coalition launched educatingalllearners.org, a digital hub with resources to help schools navigate remote learning and community support. It also serves as a platform for discussions, community webinars, and connections among educators. To date, more than 1.5 million visitors have interacted with the website.

Here are some tips we have distilled that schools can use to privilege the needs of individual learners, especially those with disabilities:

+ *First, do no harm by ensuring that the physical, emotional, and psychological safety of every student is a priority.*

+ *Understand that the problems of education are in the design, not in the students.*

+ *Commit to design for the students who are most marginalized by the existing educational system, in order to best design for all.*

+ *Empower teachers to meet their students' needs, by providing time for collaboration and the right tools.*

+ *Apply principles of Universal Design for Learning to the preparation process. Learn from those bright spots.*
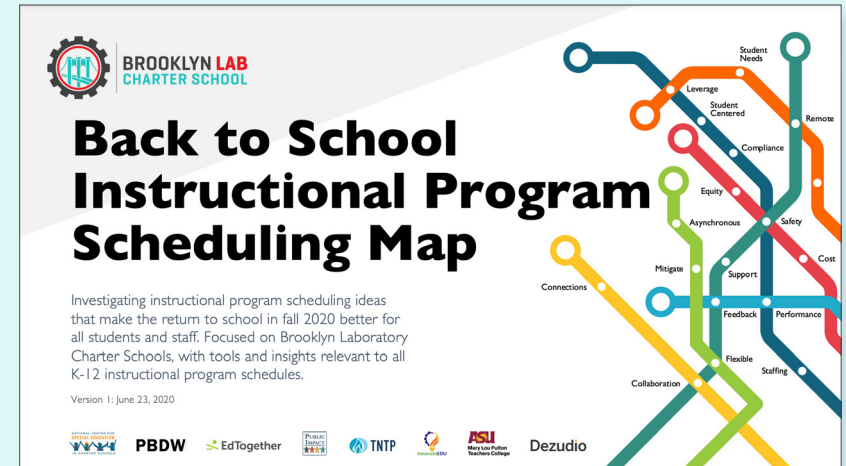
The Back to School Instructional Program Scheduling Map is a blueprint that responds to guidance on social distancing for reopening schools during COVID-19.

> **The Instructional Program Scheduling Map provides a framework to support clear communication between administrators, educators, families, and scholars so that our school community can work collaboratively and inclusively to promote safety, health, well-being, and learning when our school reopens this fall."**
>
> —Dr. Eric Tucker, Co-Founder and Executive Director

RESOURCES

⚭ "Educating All Learners to Thrive during School Closure" (Next Generation Learning Challenges)

⚭ "The Gift of Complex Learners" (XQ)

⚭ "When a School Opens Its Arms to Immigrants" (XQ)

EDUCATING ALL LEARNERS

CHALLENGE

During the COVID-19 pandemic, how do we ensure that learning moves forward for all learners, especially students with disabilities? How do we serve students with disabilities and complex learners in a way that honors evidence-based practice?
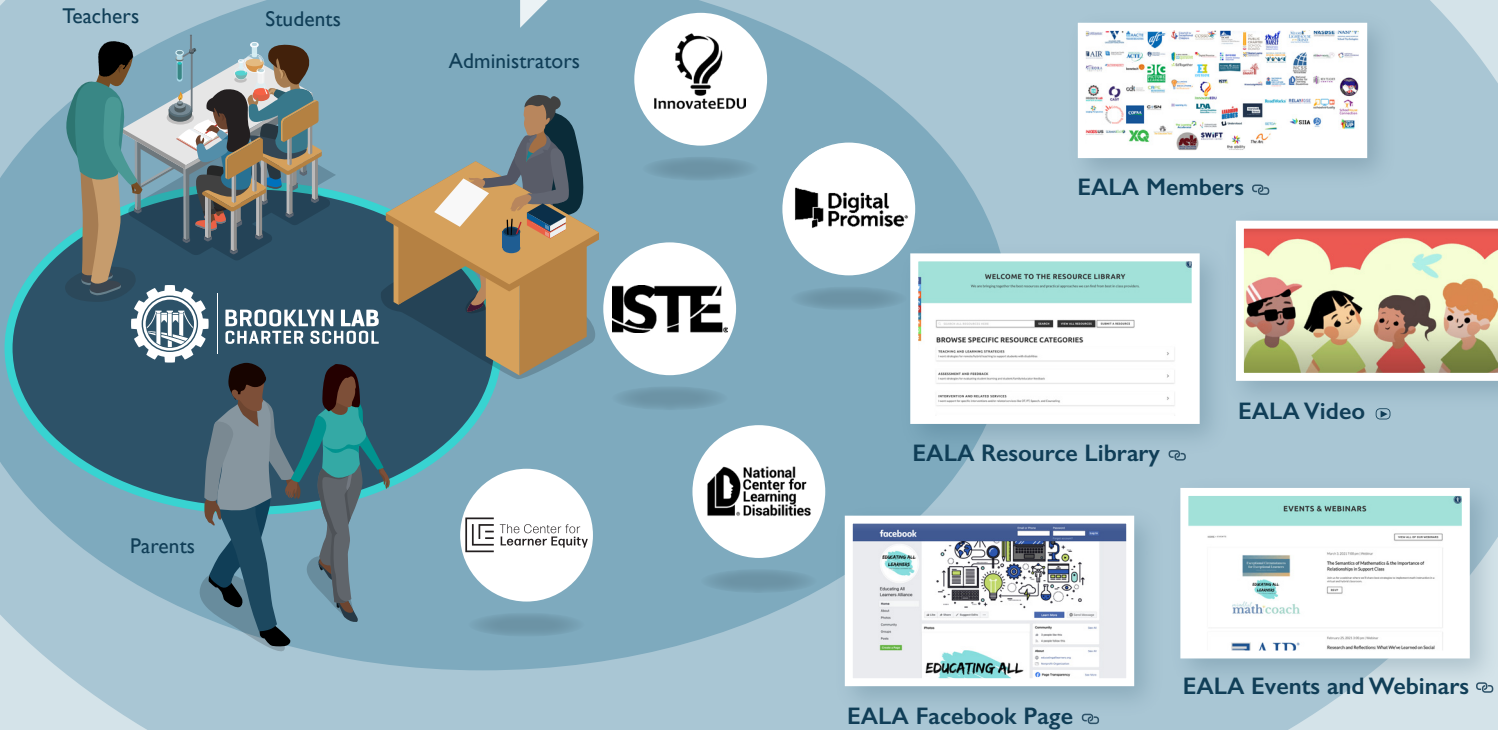
PROCESS

We connected with partners across civil rights, online learning, school administration, and disability to understand how we could bring together our collective expertise and resources to meet the needs of students with disabilities during the COVID-19 pandemic.

SOLUTION

We built the Educating All Learners Alliance (EALA), an uncommon coalition of organizations committed to resource-sharing and community-building that supports the efforts of the education community to create equity for complex learners.

BROADER IMPACT

The evidence-based resources that Brooklyn LAB identified and curated to support educators and coordinators to meet the needs of students with disabilities have been promoted and distributed through critical national, state, and regional channels.

Teachers
Students
Administrators
Parents

BROOKLYN LAB CHARTER SCHOOL

InnovateEDU

Digital Promise

ISTE

The Center for Learner Equity

National Center for Learning Disabilities

EALA Members

WELCOME TO THE RESOURCE LIBRARY

BROWSE SPECIFIC RESOURCE CATEGORIES

EALA Resource Library

EALA Video ▶

facebook

EDUCATING ALL

EALA Facebook Page

EVENTS & WEBINARS

math coach

EALA Events and Webinars

CCSSO — Supporting States Amid Coronavirus Outbreak

mid-atlantic equity CONSORTIUM — Reopening Schools During COVID-19: Understanding Possible Models, Stakeholder Needs, and Best Practices to Advance Educational Equity

NGLC — Educating All Learners to Thrive During School Closure

FORDHAM — We Can Rise to the Challenge of Educating Students with Disabilities During COVID-19

EDUCATING ALL LEARNERS — 1.5 million website hits on educatingalllearners.org and 23,000 average weekly searches since April 2020.

Council of Chief State School Officers (CCSSO) Restart & Recovery: Serving Students with Disabilities During COVID-19

RESTART & RECOVERY SERVING STUDENTS WITH DISABILITIES DURING COVID-19

California Department of Education Stronger Together: A Guidebook for the Safe Reopening of California's Public Schools

STRONGER TOGETHER A GUIDEBOOK FOR THE SAFE REOPENING OF CALIFORNIA'S PUBLIC SCHOOLS

Minnesota Department of Education Fall Guidance 2020-21: Special Education Due Process

New Jersey Department of Education Restart & Recovery Plan: The Road Back

INSIGHT 3: BUILD STUDENT PERSONAS TO BUILD EMPATHY

This period of upheaval has revealed how public schools serve as a critical safety net for tens of millions of students. With the abrupt shutdown of schools, our most vulnerable students lost a lot: connections with peers and trusted adults, stable routines, free in-school meals, and access to health and counseling services. They have endured varying traumas, including loss of family income, illness or death of a relative, and extended social isolation.

To better understand our students' diverse experiences prior to and during the pandemic, Brooklyn LAB partnered with the Community Success Institute and outside experts to develop student personas, also known as student-user journeys. The team created the personas based on interviews conducted over the summer with a range of experts, including special education teachers, a family engagement coordinator, an attendance teacher, and others from both charter and non-charter schools. These are research-based composites of different types of students and their individual journeys through the education system, with an emphasis on special education services.

Our staff has used these personas to develop specific strategies to support a range of students. For example, one persona of a student with a hearing impairment allows staff to think through what kind of technical assistance the student will need to participate in remote learning.

Personas have been an especially important part of professional development for early-career educators whose lived experiences may be different than those of the students they work with. When educators study realistic scenarios they may encounter in the classroom—a student who is homeless, undocumented, or has a mental health disorder, for instance—it prepares them for difficult future conversations and builds empathy, which is the first step in any HCD process.

COVID-19 Resurgence Student Journeys

Dillon, Age 14, Hearing Impairment, Speech Impairment
Dillon has trouble reading lips during his online classes.

Isabel, Age 9, Specific Learning Disability
Isabel relies on her older sister, Sarah, to set up her online classes and therapy appointments.

Here are three steps schools can follow to start building student personas:

1 *Conduct informational interviews with a diverse group of individuals, including staff, special education experts, and families to learn about their lived experiences and pain points.*

2 *Use the information to create composites that are representative of the most vulnerable students.*

3 *Map out the specific tools and interventions that can assist each of those student personas as they journey through a school day or week.*

Personas should reflect a diverse group of students with a variety of special needs and individualized education plans (IEPs), including the most common conditions: autism, a hearing and speech impairment, a learning disability, an emotional disturbance, and a health impairment (such as asthma). They might also detail each student's individual challenges with technology access, family support, and school support during quarantine.

RESOURCES

🔗 COVID-19 Resurgence Student Journeys

🔗 Brooklyn LAB Student Personas for High School Planning

SAFEGUARDING SCHOOL COMMUNITY HEALTH & WELL-BEING

CHALLENGE

How do we reopen and operate a school in a way that safeguards the physical, mental, and emotional health and well-being of our school community?
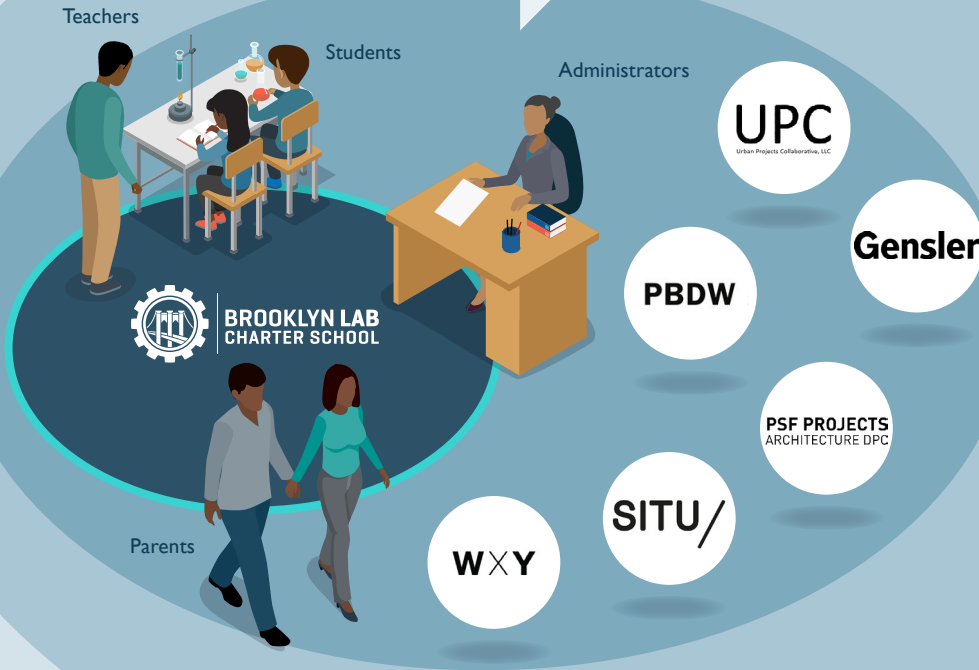
PROCESS

We gathered a group of educators and designers to explore solutions for different challenges, including new safe arrival and departure plans and new classroom layouts that would comply with social distancing requirements while meeting the needs of students and families, educators, and staff.

SOLUTION

Together, we developed a toolkit consistent with the Centers for Disease Control and Prevention (CDC) and the American Federation of Teachers (AFT). Our recommendations include how to map a safe journey from home to the school and how to upgrade school spaces.

BROADER IMPACT

Our rapid-cycle generation and refinement of evidence-based solutions influenced how the fields of architecture, engineering, facilities management, and school operations prepared for reopening.

Teachers
Students
Administrators
Parents

BROOKLYN LAB CHARTER SCHOOL

UPC Urban Projects Collaborative, LLC

Gensler

PBDW

PSF PROJECTS ARCHITECTURE DPC

SITU/

WXY

Back to School Facilities Tool Kit

Back to School Facilities Toolkit

PUBLIC SCHOOL FACILITIES PLANNING IN THE ERA OF COVID-19

Public School Facilities Planning in the Era of COVID-19 Guide

AIA New York — The Back to School Facilities Toolkit Helps Visualize School Design after COVID-19

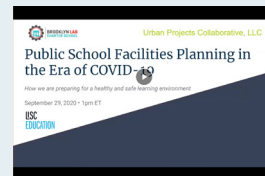ARCHITECT — Visualizations: The Future of Shared Space in NYC

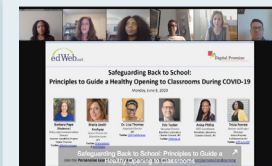Building Hope — Strategies for a Safe School Reopening

American Institute of Architects (AIA) Reopening America: Strategies for Safer Schools

Architectural Record Firms Develop Strategies for Adapting K–12 Schools to the Pandemic

Local Initiatives Support Corporation Back to School Facilities Planning in COVID-19 Era

American Federation of Teachers Safeguarding Back to School: Reopening Webinar

INSIGHT 4: ENLIST COACHES FOR STUDENT SUCCESS

While all educators need to deepen their understanding of students' lived experiences, schools should consider identifying a primary person who supports each student to learn and thrive. Acting with empathy to build agency in our most vulnerable students is imperative, but limited time and resources can make this challenging.

By training a team of "success coaches"—a trusted, loving, primary contact who works with students one-on-one and in small-group settings via hybrid, virtual, and in-person learning models—schools can help address the most urgent needs as they arise. At Brooklyn LAB, we have spent the last year building the capacity of adults who work with our scholars to serve as success coaches who shepherd students through the pandemic in two key ways: by helping them process the pain and lasting traumas brought on by the crisis, and by ensuring students have the physical, social, and emotional support they need to achieve their learning goals.

Our success coaches play a number of roles, but first and foremost they understand and build upon the values, strengths, and assets of students. As mentors and coaches, they help students to invest intense effort in their academics and persist through blocks like lack of motivation. They also work with students in more traditional roles, such as tutors, to support student mastery of critical content and competencies.

Other schools can follow this blueprint and train existing staff members or even parents and volunteers as success coaches. Using the "job description" outlined above, schools can then deploy success coaches to lead a number of activities:

+ *brief check-ins on a daily or weekly basis, either in person or virtually;*

+ *coordination of services and supports in a seamless and connected manner;*

+ *small-group tutoring in specific content areas, during or after class; and*

+ *one-on-one student coaching and mentoring.*

The [Back to School Success Coaching Playbook](#) shares best practices for building and using a network of success coaches to support scholars navigating life and learning transitions.

> **Success coaching is one way to help ensure that the health, safety, wellbeing, and learning needs of youth are supported through research-informed responses to the many challenges COVID-19 presents."**
>
> —Jennifer Charlot, Partner at Transcend

RESOURCES

"[Schools Need a Success Coach for Every Learner](#)" (Getting Smart)
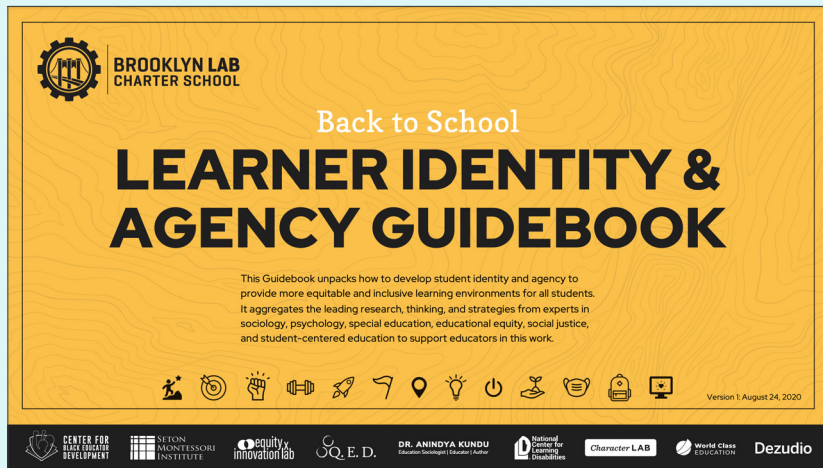
[The Back to School Learner Identity and Agency Guidebook](#) unpacks how to develop student identity and agency equitably and inclusively.

> " **The pandemic has taught us that adaptability, resourcefulness, and ingenuity are non-negotiable traits. We can cultivate these in our children by looking to first foster their agency so they can determine their own future."**
>
> —[Dr. Anindya Kundu](#)

RESOURCES

🔗 "[Visiting Prospective Internship and Externship Sites](#)" (GoPro Student Exploration of Neighborhoods)

🔗 "[Arguing for Agency: One Student-led Classroom Debate at a Time](#)" (Getting Smart)

INSIGHT 5: PRIORITIZE LEARNER IDENTITY AND AGENCY

Amid COVID-19, ongoing racial injustice, and the economic downturn, we see a unique opportunity to shift the power dynamics in education from school leaders to students. We are working with intention to design school experiences that affirm and develop students' authentic identities, personalize learning, and cultivate student agency.

To support educators in these efforts, we developed a Learner Identity and Agency Guidebook with expert partners including the Center for Black Educator Development and the EquityXInnovation Lab at Duquesne University.

Another approach we've taken to promote agency is to "debatify" our curriculum and deliberation around school responses to critical challenges. This is a process of pressing our community to take ownership of good decisions for themselves and their schools based on factual information. We encourage teachers, students, and families to have discussions and debate about different aspects of the pandemic and appropriate responses and protocols that can minimize risk and keep communities safe and healthy. They explore different points of view, challenge each other's assumptions, and debate the options regarding what constitutes the best solution.

Other schools can adapt this approach by having internal discussions about how to improve student agency. Start these discussion with two questions:

+ *How might you best teach students self-advocacy and self-determination skills, while addressing power inequities in the classroom and society as a whole?*

+ *How might you increase the opportunities for youth to organize to redesign an inequitable program, policy, practice, or space in their schools or communities?*

Watch student Jazmin Holloway deliver her TEDx speech:
"Protesting the Portrayal of Racial Justice Movements in America."

"
When schools reopen, they could be spaces of justice, high expectations, creativity, and processing the collective trauma of COVID-19."

—Dr. Bettina Love, author of *We Want to Do More Than Survive: Abolitionist Teaching and the Pursuit of Educational Freedom*

STUDENT VOICES
Highlights from Brooklyn LAB's inaugural TEDxYouth@BrooklynLab event

TALENT SYSTEMS FOR STUDENT SUCCESS

CHALLENGE

Given the financial and health challenges created by COVID-19, as well as ongoing racial reckoning, scholars need support in a variety of learning contexts. How do we train staff to provide the necessary coaching and support for all students?
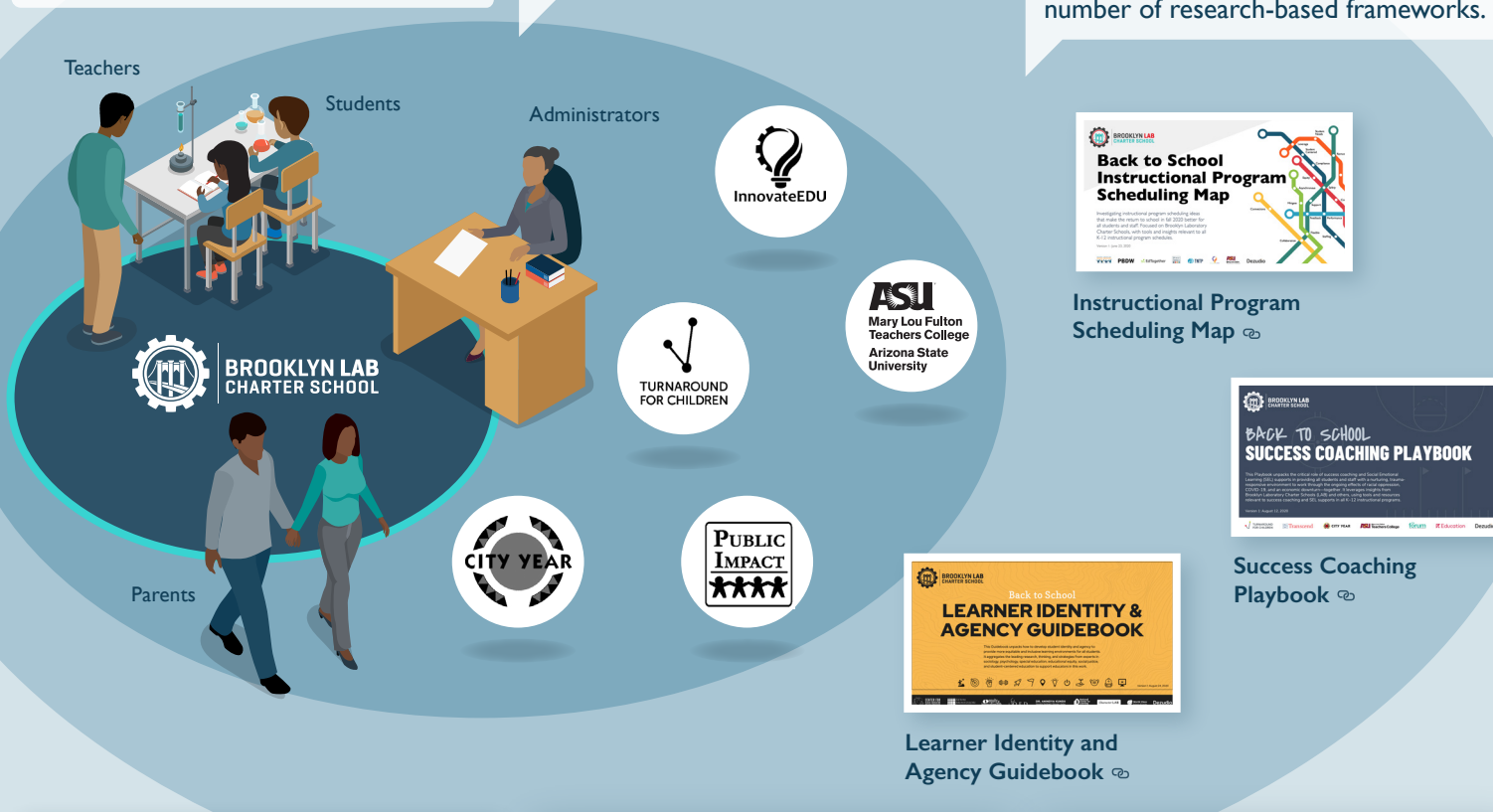
PROCESS

LAB teachers and administrators engaged in joint design sessions with a number of education organizations and a design firm to understand the best ways to implement systems to support students to learn and thrive.

SOLUTION

From our pool of staff, teachers, and school community, we recruited and trained success coaches to serve as safe, trusted advisers who can guide each student in diverse learning environments. We documented our learnings and training resources in a number of research-based frameworks.

BROADER IMPACT

Our partnerships and training resources have promoted systems and structures that support the growth, development, and effectiveness of human capital. Our solutions have impacted the national conversation, including through the following entities and events.

Teachers
Students
Administrators

InnovateEDU

ASU Mary Lou Fulton Teachers College Arizona State University

TURNAROUND FOR CHILDREN

BROOKLYN LAB CHARTER SCHOOL

CITY YEAR

PUBLIC IMPACT

Parents

Instructional Program Scheduling Map

Success Coaching Playbook

Learner Identity and Agency Guidebook

Funding for success coaching in the American Rescue Plan Act of 2021

New Models of Talent Systems for Innovative Schools

Resilient and Responsive: A conversation about planning for reopening focused on the success of students with disabilities via Education First

Turnaround for Children shares the Back to School Success Coaching Playbook

The Center for Black Educator Development shares the Learner Agency and Identity Guidebook

WestEd Center to Improve Social and Emotional Learning & School Safety COVID-19 Support Resources report includes the Success Coaching Playbook

Public Impact & Christensen Institute Innovative Staffing to Personalize Learning

InnovateEDU, City Year, ASU Teacher's College The Case for a National Corps for Student Success event

Johns Hopkins University School of Education Everyone Graduates Center Framework for Action: Building a Corps for Student Success

INSIGHT 6: EMPOWER DIVERSE, TALENTED EDUCATORS

The COVID-19 crisis has underscored the importance of racial justice in every arena, including education. A centerpiece of the movement toward racial justice within our multi-racial democracy is a commitment to building teams of educators that reflect the lived experience of families and students. Despite this urgent need, the pressures of the pandemic may cause states, districts, and schools to deprioritize teacher diversity. But to build an inclusive and equitable education system, creating a culturally competent and culturally responsive educator workforce that is representative of our most vulnerable students is imperative.

Watch student Cruz Grullon deliver his TEDx speech: "How Can You Teach a Growth Mindset?"

RESOURCES

Innovative Staffing to Personalize Learning: Talent System Case Study (Christensen Institute and Public Impact)

When Brooklyn LAB recruits faculty, we prioritize identifying educators whose backgrounds are similar to our scholars' backgrounds, who demonstrate a commitment to social justice and effective instruction, and who have the capacity to improve academic results for high-needs students. We also look for those who demonstrate the ability to inspire scholars to own their education and find joy in their learning process.

Our multipronged approach to cultivating diverse talent includes:

+ *LAB Corps Fellows: During their first year at our school, educators serve as LAB Corps Fellows whose main role is providing tutoring and mentoring services under close supervision. The structured, supportive, and hands-on pipeline program helps fellows decide whether the teaching profession is the right path for them; at the same time, administrators and tutor supervisors are able to identify promising teacher candidates.*

+ *Teacher Residency: Fellows who successfully complete their first year and are identified as promising teacher candidates are then admitted into a residency path. They spend the next two years completing their graduate studies while collaboratively co-teaching with an experienced educator.*

Being intentional about our hiring process makes a difference in how our scholars and families experience daily life at schools. One parent told us, "Seeing so many strong, kind, loving African-American males that my kid can model himself after … that is priceless. We don't see it enough in the educational system. It's [inspired] great conversations that we have at home: You can have a career in education, you can be a role model, you can lift other kids up. The teachers and deans are invested in [my child's] education and his character. They shake hands, they encourage eye contact. These are things that you want your son to hear from another male, from this person that he looks up to. He's in an environment where these men are not afraid to show they care. And that matters."

INSIGHT 7: EMBRACE ITERATION AND CONTINUOUS LEARNING

HCD and inclusive innovation processes are generally not linear. Schools that use these approaches should embrace iteration and prioritize continuous learning in order to fully reap the benefits in the short and long term.

Too often, schools create master plans that are shelved because they become quickly dated. In the midst of great loss and uncertainty, the pandemic has presented school leaders with an opportunity to reorient; they can identify practices that have surfaced in the transition to remote learning that deserve to be carried into in-person learning.

At Brooklyn LAB, we have used this iterative approach to update how we deal with grief and loss in our community during the pandemic. Our old protocol relied on in-person care and counseling, which weren't possible during remote school, so we evolved our practices and captured these new techniques in a Grief and Loss Toolkit that includes communications protocols and templates, remote counseling support plans, and resources for managing grief, counseling, and mental health in the COVID-19 era.

We have also continued to iterate our approach to evidence-gathering and diagnostics. Previously, our assessments captured static snapshots that felt cumbersome and disconnected from our core work. During the last several years, we've learned how much socio-emotional experiences and conditions affect a student's ability to learn. To ensure our assessment approach captures students' experiences more holistically, we began to develop and employ Lightweight Evidence-Gathering Instruments and Tools (LEGIT) solutions—tools that capture more about what's happening with students so that teachers can tailor their solutions in a way that helps students learn and thrive.

Lightweight Evidence-Gathering Instruments and Tools (LEGIT) for Students with Disabilities

How Inclusive Design, Learning Science Grounded Measurement, and a New Technical Ecosystem can Unlock the Potential of Assessment for Learning and Thriving

December 16, 2020

Lightweight Evidence-Gathering Instruments and Tools (LEGIT) for Students with Disabilities proposes rethinking assessment tools to work for all students.

> "From the founding of Brooklyn Lab, the idea that a school in Brooklyn could be a lighthouse for innovation and inclusion has been at the core of our mission. Brooklyn Lab is a community school that seeks to have a global impact through design differently, engaging families and scholars in the core of our work, and forming uncommon alliances. We believe that genius lives in every zipcode and as educators our sacred mission is cultivating schools to be the beating heart of the community capable of transforming that genius of our young people into positive change."

—Erin Mote, Co-Founder and Senior Advisor

There are several steps schools can take to practice iteration and ongoing learning:

+ *Ensure that educators have access to usable, actionable, real-time data to support adaptation of instruction and assessment practice.*

+ *Engage in "Plan-Do-Study-Act" cycles: (1) plan to test a prospective solution on an appropriate scale; (2) do the plan and collect data; (3) study data and glean actionable insights; (4) act based on the evidence. Initial hunches become system improvements as solutions are tested under multiple, increasingly varied conditions.*

+ *Build capacity for ongoing learning by: (1) working in teams to set specific targets for learners' academic growth and well-being; (2) conducting base assessments of levels of variation in current performance and capacity for growth; (3) supporting individual educators and teams to develop evidence- and practice-based hypotheses regarding highest-leverage improvements; (4) supporting educators as they implement interventions and practice changes; (5) integrating "step-back" reflection regarding performance against original targets and updated levels of variation and growth.*

RESURCES

🔗 Grief and Loss Toolkit (Educating All Learners Alliance)

🔗 "Students with Disabilities Deserve LEGIT Solutions: Lightweight Evidence-Gathering Instruments and Tools" (Getting Smart)

🔗 "It's Time to Prepare for COVID-19 Resurgence: Six Steps Your School Can Take" (Getting Smart)

BROOKLYN LAB'S NEW FRONT PORCH

CHALLENGE

How do we redesign school entry and exits to reduce bottlenecks that will occur when social distancing requirements and other safety measures are introduced?
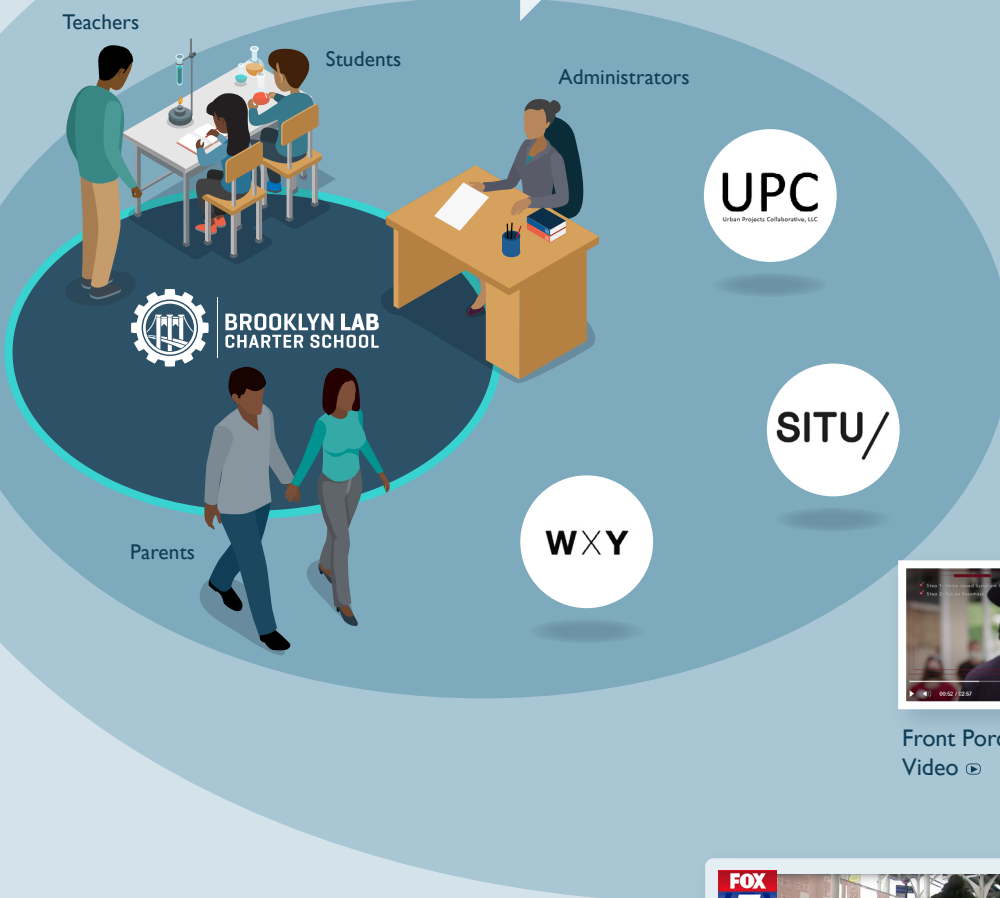
PROCESS

We gathered input from students, families, staff, and community members and developed preliminary design concepts. We developed these designs to adapt our middle and high school facilities and operations at 77 Sands Street with UPC, SITU, and WXY.

SOLUTION

We built a new Front Porch that allows for students and staff to gather at a safe social distance and allows for temperature checks, staggered scheduling, and increased points of entry.

BROADER IMPACT

In addition to serving our students, staff, and wider school community, we shared our laboratory school's practical protocols and approaches broadly to raise awareness about evidence-based solutions for a safe return to school. These efforts generated local and national news coverage.

Teachers
Students
Administrators

UPC
Urban Projects Collaborative, LLC

BROOKLYN LAB CHARTER SCHOOL

SITU/

Parents

W×Y

School Arrival Strategy to Support Re-Opening During COVID-19 🔗

Seven Steps to Design Safe and Healthy School Drop-off and Entry Routines, via Fordham Institute 🔗
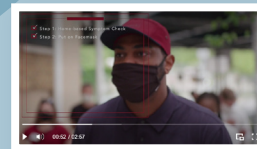
Front Porch Training Video ▶

Building Public Places for a COVID World 🔗

The Hottest Commodity in Pandemic New York? Fresh Air 🔗

NYC Unveils In-Person School Plan With Strict Rules for Shutdowns Over Positive Tests 🔗

How One Brooklyn School's New 'Front Porch' Will Safeguard Returning Students and Staff 🔗

Why Stopping COVID at Schools May Not Be as Easy as Taking Temperatures 🔗

FOX 5 | SCHOOL COVID-19 SCREENINGS

NY1 | AARON DALY

news12 | BROOKLYN SCHOOL CREATES SAFETY EXTENSION

LAB SCHOOL CHALLENGES

LIMITATIONS OF A LABORATORY SCHOOL APPROACH AND PROPOSED SOLUTIONS

We believe it's possible for motivated school leaders to use a laboratory school approach that develops insights to help reconstruct educational systems that better reflect the real needs of students, schools, and communities. At the same time, we recognize that the approach has limitations, including lack of resources like time, money, and technology. This brings us back to our overarching assertion that the U.S. education system needs to invest in laboratory schools and laboratory school approaches.

Here are three broad limitations and potential solutions to overcome these challenges:

LIMITATION 1: DISTRACTION FROM CORE SCHOOL OPERATIONS

As the system currently functions, laboratory schools' core work of operating schools may conflict with the demands of growth in directed research activity such as the inclusive HCD practices we've outlined here. This conflict could undermine the quality of laboratory schools' essential instructional work or prevent them from being as impactful, imaginative, or progressive as intended.

Proposed solution: We believe that undertaking directed research will ultimately strengthen core operational and instructional work, but both priorities must be adequately supported and funded from the outset. This guide aims to build the capacity of laboratory schools in order to offset the risk of these priorities becoming competitive rather than integrated.

EQUITY **BY** DESIGN

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LIMITATION 2: WIDER RELEVANCE NOT ASSURED

The laboratory school approach risks creating a set of resources that benefit the school itself but not a broader set of school communities.

Proposed solution: Any school that adopts a laboratory school approach to problem-solving and innovation should prioritize iteration and collaboration with both internal and external stakeholders. This will help ensure the relevance and applicability of insights outside of the laboratory school context.

LIMITATION 3: COMPLEX AND TIME-INTENSIVE

Engaging multiple partners and external resources can create dependencies and risks overextending timeframes, especially if limited by the school calendar. Brooklyn LAB worked with philanthropic partners to prioritize our laboratory school approach and each of the specific projects highlighted in this guide.

Proposed solution: Laboratory schools should ground their work in the case example, invest in appropriate project team infrastructure, and lean into existing relationships with partners to ensure timely progress.

Broadly speaking, another limitation is that entrenched bureaucracies and power structures also mean that the laboratory school approach may struggle to function as it is weighed down by the very systemic problems—racism, able-ism, classism, among others—that it is intended to address. There is no simple "fix" for this issue. Compiling and sharing this guide is one small step toward confronting widespread bias in the system.

EQUITY BY DESIGN

CALL TO ACTION

LABORATORY SCHOOLS FOR INCLUSIVE, EQUITABLE EDUCATION

Laboratory schools can help America build an inclusive, equitable system of education. As we reimagine American education for life during and post-pandemic, the laboratory school approach outlined in this guide can be—and we believe it should be—an integral part of the process.

The laboratory school approach has the potential to help:

+ *Improve engagement and knowledge of evidence-based solutions. Families, students, faculty, and administrators have access to and engage with research and evidence.*

+ *Increase efficiency of problem-solving. Components of early generation and modification work are less costly and time-consuming.*

+ *Improve clarity and relevance of evidence-based impact. With the laboratory-school approach, evidence is accessible, reflects local context, and is aligned with the interests and needs of target populations.*

Brooklyn LAB has committed significant time and effort since its founding to codifying and sharing pain points and best practices of an HCD-informed laboratory school approach in an effort to positively impact the field beyond our four school campuses. We aim to anchor our approach in practices that empower students, families, and educators to participate in directed research.

EQUITY BY DESIGN

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We believe all public schools must establish learner- and school community-centered design as common practice. This necessary and urgent work can start to scale when more schools try the HCD practices outlined in this guide.

At the same time, greater investment is crucial so laboratory schools can continue directed R&D and deepen the impact of their work via opportunities for professional learning and student success.

A truly equitable and inclusive education system is driven by shared ownership of schools among the people they serve. As we work toward this goal, it's important to be mindful that our efforts are taking place in an environment characterized by significant imbalances in power, trust, respect, and social capital. Much of our progress to date at Brooklyn LAB has resulted from explicitly pushing to build the social and cultural capital of the students, families, educators, and instructional leaders in our community. Addressing these imbalances on a larger scale is an important part of the work ahead for everyone.

The vision of Brooklyn Lab and the work at Equity By Design would not have been possible without the support of the entire Brooklyn Lab community, including the scholars, families, teachers and staff, and countless others. Our school community has been fortunate to have partners, collaborators, and allies along the way. We are grateful for the love, support, guidance, advice, partnership, and belief in the transformative power of a local school to have a global impact.

BROOKLYN LAB CHARTER SCHOOL

BROOKLYN LABORATORY CHARTER SCHOOLS

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