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IMPLEMENTATION

**BLUEPRINT
TO REIMAGINE
AMERICA'S SCHOOLS**



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Reimagine America's Schools is a project of the National Design Alliance in partnership with and funded by Schmidt Futures

How will Education be Different?

Over the past year, Reimagine America's Schools has convened dozens of leaders in education, technology, design, and politics, as well as students, parents, social welfare professionals, architects, and non-profit and for-profit leaders, to help us imagine how the pandemic might or should change education.

Four Drivers

From our multiple engagements with this highly diverse group of thought leaders, we have identified four issues that will drive change in public education and will ultimately change the *design of the learning environment*.

In this report, we will explore these four drivers of change and the implications for the future of education and learning.

- Designing for Equity
- The Intersection of Pedagogy, Technology, and Design
- Active Learning
- Crisis Preparedness

Change Is Hard

It will be tempting to return to pre-pandemic ways, but we must tackle the hard work of changing our bureaucracies, systems, and academic approaches. We must also undertake the challenge of thinking differently about where learning happens and what the learning environment looks like. So change will be necessary, but change is not easy. In this report, you will read about four change strategies from four entirely different circumstances. Perhaps these stories will inspire you to lead change in your own community.

Addressing Equity in Our Schools

As President Biden has stated, we must “...develop a comprehensive approach to advancing equity for those who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality.”

In this report, we present Community Schools 3.0, a strategy that integrates the four drivers of change into a *comprehensive approach*.

Community Schools 3.0 builds on the growing momentum of the community school movement but also turns its attention to strengthening the neighborhoods that are home to underperforming and under-resourced schools. Community Schools 3.0 blurs the lines that separate the school and community.

Reimagine America's Schools hopes that you will find our work, as conveyed in this report, helpful and inspiring. We hope it will provide a blueprint to help you Reimagine your school. If you are with a district, we would love to hear from you. If you are an architect who knows of a district that is ready for change, let us know.



Ron Bogle

Ron Bogle,

President & CEO, National Design Alliance
Team Leader, Reimagine America's Schools

Reimagine America's Schools is a non-profit organization that is leading the creation of a national movement to design schools for 2050 rather than 1950. RAS offers pro-bono services to public schools and communities seeking to create innovative learning environments that serve all learners. Our collaborative design charrettes and other engagements disrupt the traditional design process. We assist learning organizations using our design process and design tools to help them achieve their most ambitious ideas in the service of students, educators, and communities. Our nationally recognized design experts work with schools and communities to design practical and implementable concepts to support the urgently needed transformation of public education.



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Roberto Rodriguez
President & CEO, Teach Plus

“What makes this moment different and this conversation different than earlier iterations that many of us have had around how to reimagine America’s schools? This conversation around Community Schools 3.0 as a frame, is the imperative for integration, for thinking about how we think about pedagogy, and new pedagogies, and teaching and learning. How we think about new designs, architecture and physical space. The use of technology, the attention to active learning, the importance of centering around student agency. The idea of actively engaging our communities not as afterthoughts, but as agents early in the design. All of these things, integrating all of these ideas around what the future of our schooling can look like is what looks different than earlier iterations on these conversations.”



SUMMIT, FORUM, INTERVIEW, AND EVENT PARTICIPANTS



Patricia Josephs

Designer, Cuningham Group Architecture, Inc.

*"Something that we talk about often is designing with and not for
and that's a beautiful concept"*

Summit, Forum, Interview, and Event Participants



Kumar Garg
Managing Director and Head of Partnerships
Schmidt Futures



Ron Bogle
President & CEO
National Design Alliance
Team Leader
Reimagine America's Schools



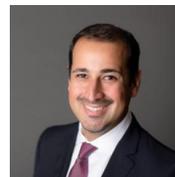
Secretary Richard Riley
former Secretary of Education and Governor of South Carolina



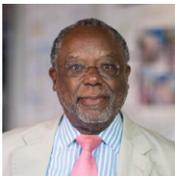
Katy Knight
Executive Director
Siegel Family Endowment



Celine Coggins
Executive Director
Grant Makers for Education



Roberto J. Rodríguez
President & CEO
Teach Plus
Member of the Biden/Harris Transition Team for Department of Education, former Deputy Assistant to the President for Education under Barack Obama



Ted Landsmark
Distinguished Professor, Director of the Dukakis Center for Urban and Regional Policy
Northeastern University



Elena Silva
Director, PreK-12 for the Education Policy Program
New America



Ashley Arhart
Principal Program Manager, Ethics & Society
Microsoft



Richard Cullata
Chief Executive Officer
International Society of Technology in Education (ISTA)



Joshua Elder
Director of Grants Management
Siegel Family Endowment



Ashley Bryan Flores
Senior Director
Child Poverty Action Lab



Emily B. McCann
CEO
Citizen Schools



Jack McCarthy
Deputy Chief Executive Officer, Executive Director
Massachusetts School Building Authority



Gregg S. Behr
Founder & Co-chair
Remake Learning
Executive Director
The Grable Foundation



Imani Day
Architect
Gensler / NOMA

Summit, Forum, Interview, and Event Participants



Tony Smith

CEO and Founder
Whyspeople
former Illinois State Superintendent
of Education



Stephanie Santoso

Director, Strategic Initiatives
Citizen Schools' Makers + Mentors
Network



Cynthia Paris MA

Superintendent of Schools
Lawrence Public Schools, MA



Pedro Rivera

President
Thaddeus Stevens College of
Technology
former Pennsylvania Secretary of Education



Maurice Cox

**Commissioner of Planning and
Development**
City of Chicago



Kyle Conley

Chief Impact Officer/Educator
Citizen Schools



Barbara Hansberry

Director of Strategic Planning
Massachusetts School Building
Authority



The Honorable Sly James

former Mayor of Kansas City, MO



Julie Critz

former Superintendent of Schools
Alexandria Public Schools, MN



Amy Yurko

Founder and President
BrainSpaces



Ani Martinez

**Professional Facilitator, Organizer,
Social Scientist**
former Field Director
Remake Learning Network



Daniel Foreman

**Director of Professional Learning
and Training**
Digital Promise



Joel Rose

**Co-Founder and Chief Executive
Officer**
New Classrooms



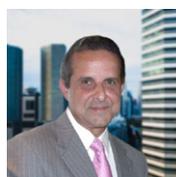
Nadia Lund

Student
Spokane Public Schools, WA



Mary Skipper

Superintendent of Schools
Somerville Public Schools, MA



The Honorable Manny Diaz

former Mayor of Miami, Florida

Summit, Forum, Interview, and Event Participants



Emily Czarnecki
Senior Associate / Senior Interior Designer
JCJ Architecture



Peter Brown
Principal
Peter Brown Architects



Joshua Lee PhD
Assistant Professor of Architecture, Track Co-chair MS AECM
Carnegie Mellon University



Dr. Lisa Ramirez
Chief Innovation Officer
Lubbock ISD, TX



Erin Peavey
Design Researcher
HKS



Malo Hutson PhD
Associate Professor Urban Planning
Columbia University



Mark Lund
Principal
Glover Middle School, Spokane Public Schools, WA



Kristen Watkins
Director, Personalized Learning
Dallas Independent School District, TX



Sarah Weissman Dirsas
Principal / Partner
KG+D Architects, PC



David Muhammad
Executive Director
National Institute for Criminal Justice Reform



Ace Parsi
Director of Innovation
National Center for Learning Disabilities



John Syvertsen
Architect



Angela DiPesa
Senior Campus Director
Citizen Schools



Leonardo Gonzalez
Director of Education, Principal
HKS



Kerry Leonard
Director of Architecture
Reimagine America's Schools



Judith Hoskens
Architect, Director PK-12 Education
Cunningham Group Architecture, Inc.

Summit, Forum, Interview, and Event Participants



Melissa Rodriguez
Associate and Senior Project Architect
HKS



Sheryl R. Abshire PhD
Ed Tech Specialist, Thought Partner & Consultant, Former CTO Calcasieu Parish Public Schools
Calcasieu Parish Public Schools, LA



Anna Yu
Chief Growth Officer
Citizen Schools



Daniel J. Warwick
Superintendent of Schools
Springfield Public Schools, MA



Dan Coleman PhD
Visiting Researcher in the Innovation Practices
MIT teaching Systems Lab
Principal
Big Sky Blue



Susana Hernandez Moragan
Chief Communications and Development Officer
Somerville Public Schools, MA



Kecia Ray EdD
Strategic Advisor
K20 Connect



John Weekes
Architect, Past Chair of the AIA Committee on Architecture for Education



Satya Basu
Digital Innovation Strategist, Associate
Perkins & Will Architects



Marilyn Denison
K-12 Education Planner
DLR Group



Steven Bingler
Founder & CEO
Concordia: Community Centered Planning & Design



John Pfluger
Principal, Education
Cunningham Group Architecture, Inc.



Jose Munoz
National Director
Coalition for Community Schools



Anne Gadwa Nicodemus
Founder
Metris Arts Consulting



Patricia Joseph
Designer
Cunningham Group Architecture, Inc.



Jim Denova
Vice-President
Claude Worthington Benedum Foundation



DESIGNING FOR EQUITY AND INCLUSION



Pedro Rivera

former Pennsylvania Secretary of Education

"I hope we learn, that when collective minds come together in response, we're able to provide the resources that our communities need. Now, whatever the new normal looks like, the difficult part of this, it's going to require some sacrifice from those of us who have. And so that's where the conversation needs to take place right now, in reminding them, your life may not go back to the exact normal that it was before. Because now we're utilizing resources through the lens of equity, in an equitable fashion, which means we may focus on serving first and foremost in a much more robust nature, some of our most vulnerable communities."

Designing for Equity and Inclusion

Most organizations and institutions typically approach the issues of equity and inclusion as matters for administrative policy or training. Rarely is the design of the environment considered a strategy for improving equity and inclusion. This is especially true in our public schools.

Yet throughout this past year, Reimagine America's Schools has shown the practical and tangible ways that the learning environment can be designed to create a more equitable and inclusive space for students, families, teachers, and staff.

Perhaps the most devastating revelation of the pandemic and simultaneous social upheaval is the full extent to which racism and educational inequities have tragically cheated millions of Americans from opportunity. This fact has always been present but has never been so evident, and we as a nation must take tangible, purposeful steps to address this injury inflicted upon fellow citizens. The COVID-19 pandemic and passionate demands for equity and inclusion will have a profound impact on how we design the next generation of schools. Equity and inclusion should become new watchwords for the design community.

In underserved communities, schools have too often been shouldering the burden of pressing needs such as food security, health care, and homelessness, demonstrating that schools are only as healthy as the communities they serve.



"A community asset such as a school really indicates how the community around it will survive or deteriorate or thrive. If a school is just in complete disrepair, we're really saying we don't care about the entire community. This is the first equitable thing is to start to really address at a systemic level."

-Imani Day

The condition of a particular school is often indicative of the condition of the larger community and its ability to survive and prosper. The poor conditions of school infrastructure in low-income communities are often accepted as a given, when it is clear that these conditions are unacceptable and should not be tolerated. As Imani Day, an architect with Gensler, expressed: "Let's just sit for a moment and realize that we accepted this for decades and allowed it to get worse, and worse, and worse, without there being someone saying, oh my goodness, no one should ever have to live or learn this way. A community asset such as a school really indicates how the community around it will survive or deteriorate or thrive. If a school is just in complete disrepair, we're really saying we don't care about the entire community. This is the first equitable thing is to start to really address at a systemic level."

Civic and education leaders have a central role in addressing these racial and economic inequities in both educational settings and communities. Leaders need to recognize and appreciate community concerns through a process that allows for nontraditional voices to be heard. And both a community's legacies and needs must be embraced in designing schools that serve the wider community, particularly those who reside in underserved areas. There is opportunity for mayors and city planners to do much more integrated planning, especially around schools.

Re-thinking the whole concept of school and letting go of the old notion of control, Daniel Foreman, Director of Professional Learning and Training with Digital Promise, observed, “All of these old schools were built around control as opposed to learning: this is the front of the classroom. This is where learning occurs. Everybody should look this way. I am in charge and I’m going to control everything that’s happening here.”

Less control and more understanding, particularly understanding of the community, whose knowledge and expertise must be tapped into throughout the design process. There is a great need to understand who is part of the community and what their needs truly are, from improving educational opportunity to food security and healthcare. The legacy, stories, and history of the community can help inform the design process. As Patricia Joseph, a designer with Cuningham Group Architects, commented: “Something that we talk about often is designing with and not for, and that’s a beautiful concept because I think that it gets at the root of answering this question and that is who are we designing for?”

Architects must “design with empathy” so that the resulting learning spaces fully reflect the needs of the community. This can only occur when architects recognize and appreciate community concerns through an authentic engagement process that involves more than just a community meeting and design presentation. Inclusion relies on ongoing engagement and work with the community, thus leading to a design that truly meets community needs and reflects its values.

“Humility is a key skill for the designers and architects charged with creating tomorrow’s learning environments”

-Joshua Elder

Joshua Elder, Director of Grants Management with Siegel Family Endowment, in a short follow-up commentary on this discussion, wrote, “Humility is a key skill for the designers and architects charged with creating tomorrow’s learning environments ...Often, the most effective interventions are informed by a willingness to truly listen to voices from the community.”

Malo Hutson, Associate Professor in Urban Planning at Columbia University, shared his thoughts: “I think right now calls for that time of reflection for all of us. To think about how we contribute to the problem, how we’re trying to be a part of solving the problem, but more importantly, understanding how each community has these different needs and histories, and it’s complex, but being willing to roll up your sleeves and get involved and understand all these other dynamics.

“I’ve never gone to a vulnerable community or underserved community that says, ‘I don’t want investment, I don’t want a good quality of life, I don’t want access.’ They all do. They want the same things, but what they differ on is how they can go about getting it. They want to be at the table. They don’t want you bringing in the chain when they already have the mom and pop that’s already there. They want to not look at them as having the problem, but understanding where their strengths are.”

To paraphrase author Angela Glover Blackwell, seeking equity in schools and neighborhoods is a superior growth strategy. Community schools should be seen as one of several anchor institutions that can create a web of community support for children and families. There is a need to see these schools as part of a wider community ecosystem. A deep commitment to the needs of the whole child, from food security to healthcare, is central to community schools.



There is a continuing need to break down the silos that too often disconnect schools, social service agencies, and private non-profit organizations. The Community Schools 3.0 concept will provide a common platform for communities to apply a shared management or integrated support service model. The results of Community School 3.0 will offer mayors, foundation executives, and educational leaders tangible strategies to significantly expand and extend support to underserved neighborhoods, families, and students.





LEARNING AT THE INTERSECTION OF TECHNOLOGY AND DESIGN



Satya Basu

Digital Innovation Strategist, Perkins & Will Architects

“There are a lot of classrooms where the first instruction is to put your phones away. But sometimes it’s like we’re telling them to turn off the part of their brain that is being engaged by tech companies and social media, to try and bring them into an experience. That, again, is an interface about a singular technology. It’s about the blackboard, it’s about the projector screen, all eyes on one person. There are things we could start to do to leverage that interactivity of personal technology and the built environment as well as outside the built environment.”

Learning at the Intersection of Technology and Design

For decades, technology has been a dominant influence in reshaping the way we approach teaching and learning. While there are numerous examples of educators and architects creating new school designs that integrate new technologies, the majority of schools are still designed on a model from when the most advanced technology was electricity and blackboards. The educational delivery system for these schools requires that a specific group of students be in a specific place at a specific time to hear the same specific message. However, we are no longer bound by those limitations.

Even where the most current technology is used, the learning environment often undermines its full impact, and too often, we continue to build 20th-century learning spaces and stuff them full of 21st-century technology, forcing students and educators to do “work-arounds” to overcome the spatial limitations.

Richard Culatta, CEO of the International Society for Technology in Education (ISTE), sums up the challenge in our new COVID environment this way: “What do effective learning environments look like in a world that is highly technology infused, but a world that also has a very real physical presence to it? We need to be very bold about the conversation about what the future of learning spaces looks like when physical and digital space are blurred.”

This is a pressing question given the evolving state of public education. The pandemic has created a massive shift toward distance learning, and in the post-pandemic world, blended learning will become more dominant. The pandemic has also accelerated new efforts to achieve digital equity as millions of poor families, for the first time, received portable devices and access to the internet. Numerous obstacles remain to closing the equity gap. There is an enormous concern that millions of children who were already behind in their education have lost an entire year of schooling.

These events of the past year demonstrate that the internet should be thought of as a utility, not subscription-based and not a luxury, especially if public education is requiring students to be able to learn online. Technology on the home front will only increase in the years to come. The challenge for educators will be to connect the dots between school and home, as well as other places where learning and teaching happen.

Technology in education is advancing at an accelerating pace, but we are not giving enough thought to the ethical and safety implications when it comes to the education of children; policy and legislation guiding how students and educators will interact with technology and data need to catch up. We haven't had the time to think through the ethical implications, or how policy will reflect this new digital landscape. There is also an urgent need for a new common vocabulary between educators and technology experts in order to create a new policy landscape for the future.

“We need to be very bold about the conversation about what the future of learning spaces looks like when physical and digital space are blurred.”

-Richard Culatta



We are in something of a historical moment, as Ashley Arhart, Principal Program Manager, Ethics & Society at Microsoft, noted, “I think relative to the physical plant, that is the school building we are actually presented with an opportunity that’s no less transformative than the inclusion of indoor plumbing and indoor electricity or electricity generally. When you think about the way architecture changed to incorporate these new utilities, positioning internet access as utility is a really great foundational premise that we should all advocate for.”

Technology has the capacity to encourage greater parental, civic, and community engagement. Giving poor families access to technology gives them an earlier and faster portal to engage teachers more frequently. Given this new environment, a much greater emphasis has to be placed on how schools can provide skills for virtual learning and how to provide training for both teachers and parents in effective use of technologies.

Educators, architects, and technology experts must work together to create a more integrated approach to bringing technology into the learning environment. There is no question that we should not go back to past practices; we can’t rely on 20th-century school models. With a great deal of enthusiasm, our experts agreed that the pandemic is changing the way we think about new configurations for educational space.

Going forward, technology has to fit the pedagogy, not the other way around. The design problem is not just about a physical thing, but more of an attitude that allows for a whole range of experiences. We are coming to a time when we need to consider space itself as a technological entity. AI will be transformative, but we need policies in place for its implementation and we are not where we should be when it comes to meshing AI and educational policy that safeguards children.

There are fantastic yet plausible ways in which existing and emerging technologies can interact with the actual design of a school to create a learning experience that supports significant changes in the education experience and promising increases in student learning. Ashley Arhart noted that we are in a moment when we have “a remarkable opportunity to actively engage the students in the creation of their own environments in many ways, rather than this being foisted upon them. If we gave them the tools to actively collaborate and create these new environments on their own behalf, first of all, I think they’ll just be better. Second it would allow these future leaders to be both digital natives and also digitally inventive.”

Over time, we have seen how the image of the public school as an isolated citadel of learning cut off from the larger community has evolved. In the last twenty years we have seen a greater emphasis on shared space and colocation initiatives, and now we are seeing a further evolution of design thinking. Technology can link the public school to small community learning centers seeded throughout neighborhoods to create a larger and more vibrant learning community. The San Francisco School District is currently adopting this model in response to the pandemic. Community schools can create a vibrant and more expansive learning community by adopting a hub and spoke expansion with small learning centers throughout the surrounding neighborhoods. The main campus can still play important and multiple roles as a school, even as smaller learning centers connected by smart technology offer maker-space opportunities, places where mentors and students can meet, locations for CTE programs, and safe places for additional out-of-school study time.



“a remarkable opportunity to actively engage the students in the creation of their own environments”

-Ashley Arhart



ACTIVE LEARNING



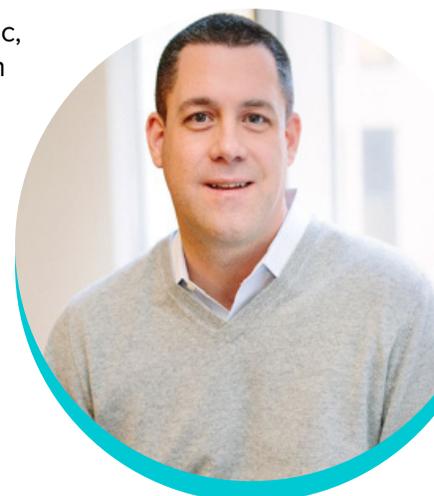
Ashley Flores

Senior Director, Child Poverty Lab

"Schools have to be able to tap into the interests and passions of their students. Having a cookie-cutter curriculum that doesn't allow space for creative exploration and curiosity is very problematic. I'm a big supporter of project-based learning and learning through doing. Opportunities for students to find meaning and make meaning through creation and exploration is critical."

Active Learning

The approach to teaching and learning in K-12 public education is often seen as static, with changes coming slowly. The school year is still based on a 19th-century agrarian calendar, and the number of credits a student needs to graduate from high school is still based on the century-old Carnegie unit of measurement. Too often, students sit in the same room at the same time and hear the same thing and then get up and move to the next room to do it again. Yet within our schools, there is also evidence of flexibility and innovation: rapid changes in technology; the success of STEM, STEAM, maker, project-based, and technology-enhanced learning; and a growing emphasis on career academies - all evidence of the ability of public education to evolve. Creating a learning environment that supports and enhances active and inquiry-based learning was the major focus for Reimagine America's Schools prior to the pandemic and continues to be a driver as we look at education after the pandemic.



New programs that engage learners in more active, hands-on learning experiences are changing the landscape, and students are seeing better outcomes in their educational achievement as a result. While educational programs are changing, there is a significant disconnect between the “last generation” design of the learning environment and the promise of these new teaching practices. This is why Reimagine America's Schools has focused on the role that design can play in re-shaping the active learning environment to support these new innovations in learning. Gregg Behr, Founder and Co-Chair of Remake Learning, explained, “We’re recognizing that kids are developing their identities differently, they’re seeking affirmation differently, they’re consuming and producing information differently, their lives are fundamentally different, at an accelerated pace, in a way that you and I didn’t experience as young people. If in fact their lives are different, and now we know from neuroscience that their brains are actually developing differently, how is it that we structure schooling, how do we support experiences in museums and libraries, how do we think about the out-of-school time opportunities, or the at-home learning opportunities? We need to think fundamentally differently about these kids and their futures.”

Our schools are developing new instructional methods for our new economy; there is an urgent need to create a space inside our school buildings to support these programs and connections to the real-world community. This means that there will be noisy and quiet space, clean and cluttered space, one-on-one and group space, project space and even traditional lecture space. In fact, students may even be able to engage more actively outside of the learning space within the community and have an opportunity to build job and career pipelines. Students may find a life direction that may not have been available to them before just because of a lack of exposure and a lack of knowledge about possibilities.

Student-centered learning, particularly students who learn in alternative fashions, may mean schools connecting back into the community, placing students in environments where they can learn from and be inspired by professionals, artisans, and leaders in their community.

Thinking about how the environment shapes creativity and how it influences learning, we can look to workplaces like Google, where there is a total transformation of the environment, all driven towards

“We need to think fundamentally differently about these kids and their futures.”

-Gregg S. Behr

stimulating creativity. We want to know how different innovations in environmental design can stimulate learning.

We have all seen examples of how a few students in high school, middle school, and younger grades are motivated to change the world to create a better future for themselves and others. These inspirational stories in which students connect with the real world should be the norm that education strives for.

Space, when thoughtfully considered along with technology, can enhance the learning environment. We know that there are certain keys to good design for active learning, including flexibility, space that allows for movement (even playfulness), space for both collaboration and individuality, and access to high-tech and low-tech tools.

Mary Skipper, Superintendent of Somerville Public Schools in Massachusetts, commented on the relationship of space, design, and active learning programs: “It’s not crazy to think that the adjacencies of rooms make a difference, that putting physics which would be seen as an academic subject next to

“It’s not crazy to think that the adjacencies of rooms make a difference, that putting physics which would be seen as an academic subject next to CTE, our electrical shop, next to our robotics club, that those adjacencies might actually flow in a very real world way, because that’s how students best learn.”

-Mary Skipper

CTE, our electrical shop, next to our robotics club, that those adjacencies might actually flow in a very real world way, because that’s how students best learn. They don’t think physics, robotics, electrical. If they do, then when they go out into the real world, they haven’t synthesized those skills enough to really use them. So how could we really think both the layout of the school, but also from the educational program, how we might deliver curriculum or do programmatic delivery in a way that was really different in terms of teacher collaboration, staff collaboration, bringing the business community in.

How could we use those as assets when we were building the educational program in a way to have them work together in ways they had not traditionally done so? The way we’ve organized space in the building for somebody walking through, it would not speak to a typical programming where all the physics is together, all the science is together, all of the math is together as many traditional high schools have. Instead, you see a blending of CTE

and traditional academics in business, because that is how our students are going to experience it and need to be able to use it going forward.”

Our work with Remake Learning and Gregg Behr in Pittsburgh and Emily McCann at Citizen Schools has helped us focus on practical, implementable strategies. However, the events of 2020 have brought even greater focus on the power of STEM and maker learning to support students in low-income communities. Students in well-resourced neighborhoods have access to an abundance of extracurricular STEM, STEAM, and maker-centered learning and career pathway opportunities. But these opportunities may be closed to students in low-income communities, whose families may lack the necessary financial means, transportation, information, and community support networks.

By actively including access to STEM and maker learning and building pipeline opportunities in Community Schools 3.0, we can overcome these blocked pathways, build new pipelines, and open new opportunities for these future citizens.





CRISIS PREPAREDNESS: A NEW GENERATION OF RESILIENT SCHOOL BUILDINGS



The Honorable Manny Diaz
former Mayor of Miami, FL

"In terms of neighborhood, schools should physically be at the center of community, because it's government in the neighborhood. Food drives today, where are they taking place? Mostly in a lot of schools. When you see a hurricane threaten South Florida, like we did last week, where are the shelters? Schools. So, it should be our community 'home' in terms of the physical structure. Now, with regards to the rest of it, it's fundamental. The sustainability of a city and of the people in that city begins and ends with education. If you're failing there, you will be nowhere as a city."

Crisis Preparedness: A New Generation of Resilient School Buildings

Schools are regularly called upon to fulfill community needs beyond their intended purpose. The critical need for schools to return to operation as quickly as possible after a crisis has been clearly demonstrated by the pandemic.

Last year alone, five major hurricanes battered the Gulf Coast, even as states on the west coast have battled numerous wildfires. Throughout the past decade, thousands of schools have been forced to double as emergency shelters. A generation of young people has come of age acutely aware of the impact of natural disasters and changing weather patterns on their immediate lives and on their future.

As anchors in our neighborhoods, the ability for school buildings to function after a natural disaster or societal disruption like a pandemic should be part of the planning and design of new and existing schools.

In 2005, Hurricane Katrina flooded hundreds of schools in New Orleans and its surrounding parishes. In the aftermath of Hurricane Katrina, Ron Bogle, then president of the American Architectural Foundation, led a team of urban planners into the 9th Ward and made multiple trips to New Orleans to assist in the rebuilding efforts. Bogle's teams also took on the challenge of providing assistance to 25 school districts along the Mississippi Gulf that were severely damaged by the storms and had been largely forgotten. Many of these same architects are now part of the Reimagine America's Schools initiative.

The COVID-19 pandemic has added a new understanding of how school facilities are being used in times of crisis. Our public schools did an extraordinary job in pivoting away from classroom instruction to distance learning, even as they continued to provide millions of meals to students all through the spring and summer. Schools also became community Wi-Fi hotspots and a source of critical information for many families. The arrival of millions of portable devices linked poor families to schools and the internet, overcoming the growing digital divide in one massive jump. In short, public schools came to be seen as a critical part of our nation's first response to the COVID-19 pandemic.

Most of the school facilities planning and design adaptations needed to support these extraordinary emergency demands of the last decade were shoehorned into buildings that were not built to address the growing changes in weather patterns, rising sea levels, increasing forest fires and drought, and growing susceptibility to pandemics.

In order for schools to more effectively respond to future emergencies, we need to purposefully design schools for crisis preparedness. Addressing these challenges, particularly in states that are subject to natural disasters, will require site-specific adaptations to serve community needs after a disaster like the pandemic and provide protection from hurricanes, tornados, fires, and earthquakes.

There is a critical need to establish procedures for the design of educational facilities that work in concert with multiple public agencies and organizations, where coordination and collaboration can not only increase crisis preparedness, but also improve efficiencies and save money for local taxpayers. School districts, state governments, and local communities will face years of budget tightening in a post-pandemic environment and will need to find innovative ways to manage costs. Co-designing schools and

other community assets may become a new way to get things done. In Palo Alto, California, for example, the city and school district working in tandem produced a master plan for the new \$800 million Cubberly Community Center that, through the cooperative development of programs and facilities, will decrease local taxpayers' burden by more than \$140 million over the next 40 years.

Increasing numbers of weather-related events and other external shocks can encourage a more integrated and practical approach to the planning and design of all community infrastructure. One of the key insights from our series of forums is seeing community schools in a larger context, as anchor institutions, that extend into and build up the educational infrastructure of a community. We are excited to explore the possibility of designing the next generation of community schools that can knit the fabric of a community together. We see the school facility as a central hub connecting to a series of smaller physical and virtual learning spaces throughout the community, creating deeper connections that distribute services, programs, and support throughout the neighborhood.

The American public increasingly believes that public schools should be part of our national infrastructure policy, as do a growing majority of members of Congress. This is a historic shift. The Biden administration is already making intense efforts to reopen schools and is broadening its definition of infrastructure to include public school facilities for the very first time. Early drafts of the infrastructure economic stimulus plan call for significant funding to support public school facilities, especially those in hard hit underserved communities.

Potential infrastructure and recovery funds, coupled with the \$50 billion that school districts now spend annually, may provide educators, community leaders, and the design community with a once-in-a-lifetime opportunity to reimagine how our nation's schools should be used in times of crisis and emergency and how these facilities can act as anchor institutions and help to transform community and urban ecosystems. Reimagine America's Schools believes we can play an important role in leading this national discussion, given our expertise.

We are well beyond the era of seeing energy-efficient, sustainable, green schools as the optimum statement of environmental accountability. We believe there is an urgent need to define a new set of architectural principles based on what we have learned from both climate change and the COVID-19 pandemic.

While we know a great deal today about how to design resilient buildings, our understanding of how to design for changing weather patterns, pandemics (and the possibility of new viruses), and other increasing external shocks is still very much a work in progress. There is urgency about this task given the new funding possibilities and the fact that many school superintendents may just pull blueprints off the shelf and tell architects, "Build this and do it fast, we want to get back to normal." This is a mistake we need to avoid.

We have several key goals. How might we create infrastructure in the design of a school facility that is better adapted for alternative uses during periods of crisis? How can new designs allow schools to become more resilient and come back online faster after natural disasters? How do public schools, working with mayors and other public officials, fit into a wider community response to a crisis?



FOUR STRATEGIES FOR CHANGE AND INNOVATION





Cynthia Paris

Superintendent of Schools, Lawrence, MA

“My big takeaway is that, if you are able to partner with an agency organization like the MSBA, you’ve won the lottery, think about how to be able to have an inclusive process, ensuring that you start with your learners first, your families and staff, of course, and the community that eventually will be there long after you are a superintendent.”

Be sensitive to the fact that buildings stay for a long time. They become a point of pride in a city and in a district. They are what the community gathers around. Keep that in mind, make sure that feedback is gathered throughout this process, and push the boundaries. Dream big with your people, and enjoy it. It’s a fun process to be part of.”

Four Strategies for Change and Innovation

Public education is an immense part of American life, with 50 million children, 5 million teachers, administrators, and staff in over 100,000 public school buildings. Prior to the pandemic, over 25% of the American public had some engagement with a public school each day. While public education remains very much locally driven when it comes to governance and decision-making, the sheer size and scale of the enterprise makes institutional change challenging. Inertia, tradition, established habits of thinking, calcified bureaucracies, and competing centers of power create powerful resistance to new ideas.

Yet change does occur, and then there are unique moments when all agree that change must occur.

The COVID-19 pandemic has now put into stark relief the immense inequality and racial injustice that is baked into the very core of American public education. In the years to come, we have no choice but to change the very foundation and design of public education - its structures and institutions, rules and regulations, and habits of thinking that have denied millions of children the quality education they deserve.

But change is hard and there are no real established road maps for how change occurs in public education. That said, we want to shine a light on four examples illustrating four different strategies of how change can happen in public education:

- First, we look at a case study in transformation and an example of reform from outside the traditional strategies of school improvement; a small group of civic minded leaders in Oklahoma City was able to build a community coalition that created a movement to change both the core pedagogy and institutional funding patterns to build new facilities, overcoming decades of decline in the Oklahoma City public education system.
- Then, we look at how former Miami mayor Manny Diaz used his bully pulpit to win election on a campaign pledge to reform education and how he successfully used the power of the mayor's office to reform the city's public education system and find new resources and allies outside the educational system.
- Next, we examine how Joel Rose, an educational innovator and former Chief Executive for Human Capital at the New York City Department of Education, was able to create his School of One model to improve math education. That change was possible because a brilliant educator advanced a transformational learning plan that the bureaucracy might have rejected except for the overt institutional support of then Chancellor Joel Klein.
- We end with the innovative program in Massachusetts that has created a new standard for excellence, even when that change was sparked by an institutional crisis. Here we look at a case study of how the failure of the Massachusetts state school facility funding system in 2004 led to the creation of the unique, transformative, and highly successful Massachusetts School Building Authority (MSBA).

Oklahoma City: MAPS for KIDS

In November 2001, after forty years of decline in their public schools, the voters of Oklahoma City approved a combined bond and tax referendum in the amount of \$700 million for school construction. Like so many city school districts, the school district had been hard hit by the desegregation of public schools in the 1970s and had seen its student population decline from 70,000 to 38,000. The effort to reform educational programming and rebuild the school system's facilities began in 1999 when a diverse group of civic, business, and community leaders facilitated a collaborative planning process that included the city of Oklahoma City, the public school system of Oklahoma City, and the Oklahoma City Public Schools Foundation. The former mayor of Oklahoma City, Kirk Humphreys, was a prominent leader in this initiative. The reform and rebuilding of the school system built on a larger effort by civic leaders to revive the city's inner core, a \$3 billion public-private initiative called [Metropolitan Area Projects](#) (MAPS).

Civic leaders set up Project KIDS (Keep Improving District Schools) to study the Oklahoma City School District and its needs for the future. Over the course of a year, the Project KIDS Community Inclusion Initiative organized nearly 60 community meetings that involved more than 3,000 residents. The organizing committee, after extensive community forums, developed a document called "Project KIDS: Rebuilding Oklahoma City Schools," which included a list of recommendations and a framework for engaging the voters who would have to approve the bond issue. In November of 2003, Oklahoma City voters approved MAPS for KIDS, a \$470 million school construction program including more than 100 projects to be completed over ten years. The initiative required the Oklahoma City school system to go to the state legislature to gain access to funds and the creation of a quasi-government body to manage the school construction funds and to create a level of transparency that sustained the trust of the voters.

["Reimagine America's Schools Oklahoma City Case Study"](#)

Miami Transformation: Manny Diaz

Manny Diaz is the former mayor of Miami, Florida, where he forged his reputation as a national leader on urban design, focusing on sustainability and education. Diaz ranks as a high-impact mayor, in the same league as Michael Bloomberg, Richard M. Daley, and Charleston's Joseph P. Riley. He has had an impact not only on his own community, but on national leadership as well. Making transformational changes in bureaucracies is tough—in some ways, they are designed to protect the status quo. Bureaucracies tend to be rule-bound, calcified, and filled with individuals whose power and self-interest are tied to keeping things as they are. This is true in both the private sector and public. Reimagine America's Schools interviewed Manny Diaz to learn how he was able to successfully transform the Miami-Dade school system.

As mayor, Manny focused on five major drivers of growth by creating incentives and investments focused on education, affordable housing, homelessness, and digital equality. Diaz explains in his interview his ambitious education reform agenda, which included taking over the school system, running a reform slate to take over the school board, and chairing the search committee that selected the former Chancellor of New York, Rudy Crew. According to Diaz: "The combination of working with a new school system, new school board members and conducting the search for a new superintendent began a relationship/partnership with the school system, which from that point forward, grew stronger and stronger." Diaz was able to use these new relationships with the new school board members and Rudy Crew and the power of the Mayor's office to attract new resources, enabling him to drive change to improve the educational outcomes for students.

["Reimagine America's Schools interviews Manny Diaz"](#)

Educational Innovator: Joel Rose

Joel Rose is the founder of New Classrooms, a new model of how to teach that is now being used in ten states. Previously, Joel served as the Chief Executive for Human Capital at the New York City Department of Education (NYCDOE) which led him to create the School of One initiative with the support of a team of designers led by Ron Bogle while he was President and Chief Executive of the American Architectural Foundation. School of One is an innovative learning model that has a specific focus on math, which allows students to build their math skills based on their individual needs. Joel was able to successfully launch School of One in large part because he had the support and backing of the New York City School Chancellor Joel Klein.

Over the years, School of One has made significant changes by incorporating much more project-based learning with nine different modalities into the program. According to Rose, “We’ve made it a lot more flexible so it can operate in different environments; it can operate with the walls up; it can operate with the walls down. It can operate as a core program, as a supplemental program, with different sorts of staffing configurations. Over the course of ten years, School of One has accumulated over 100 million academic data points and used the data to make the scheduling and the program that much smarter.” Joel continues his work as an education innovator with his new Teach to One 360 approach.

[“Reimagine America’s Schools interviews Joel Rose”](#)

A State of Change: Massachusetts School Building Authority

The Massachusetts School Building Authority (MSBA) is a quasi-independent government authority created to reform the process of funding capital improvement projects in the Commonwealth’s public schools. In 2004, a backlog of more than 800 audits and the failure of the state legislature to properly fund the former School Building Assistance Program (SBA) had led to an accumulated debt of more than \$10 billion from the SBA’s operations.



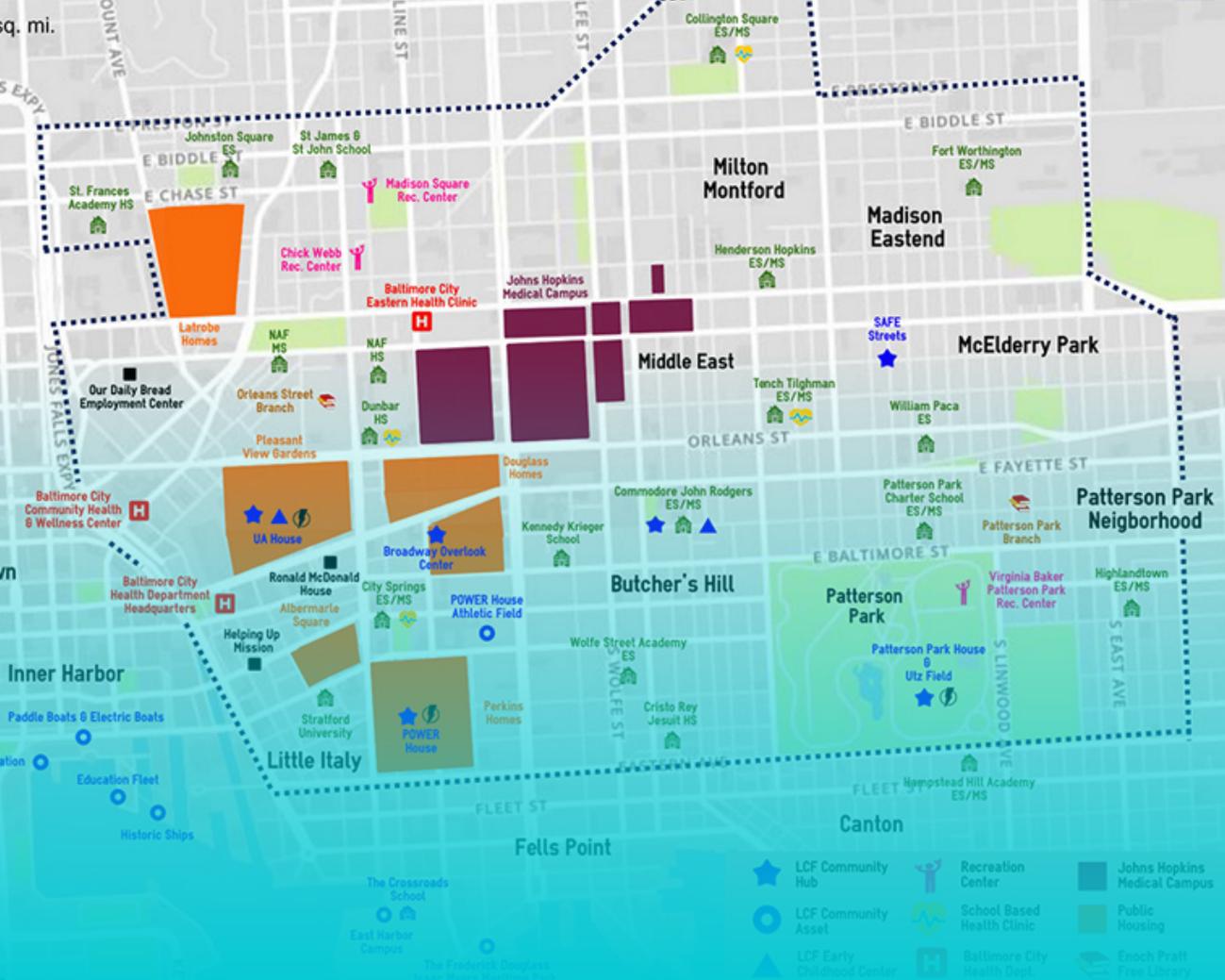
“Some people start the school design process with a budget. We start the school design process with an educational plan.”

-Jack McCarthy

The MSBA seeks to work with local communities to create affordable, sustainable, and energy-efficient schools across the state and has a dedicated revenue stream of one penny of the state’s 6.25% sales tax. Since its creation, MSBA has made more than \$14.9 billion in reimbursements to cities, towns, and regional school districts for school construction projects. Overall, MSBA has worked on over 600 projects, improving school facilities for over 600,000 students. One of the unique features of MSBA is its ability to pay school districts quickly. Once a project is approved, funding payments are made as construction progresses. Instead of waiting years for reimbursement, districts now receive payments from the MSBA usually within 15 days of submitting an online request.

This case study is an example of how creating a new process for funding, approval, and paying down debt quickly can have a substantial and real-time impact on the education of students. The process uniquely required school districts to develop an education plan before the district brought in architects to draw the plans for the new facilities. The program also required a feasibility study which had multiple benefits: a way to answer the community’s questions and concerns and a real analysis of existing facilities’ educational programming process. This, along with incentives, a model schools program, and science lab design information, led to a better overall design for schools in addition to the many cost benefits of the program. As Jack McCarthy, Executive Director of MSBA, noted, “Some people start the school design process with a budget. We start the school design process with an educational plan.”

[“Reimagine America’s Schools Massachusetts School Building Authority Forum and Case Study”](#)



2.5
SQUARE MILES
[AREA]

20
ELEMENTARY,
MIDDLE, AND/OR
HIGH SCHOOLS

5
PUBLIC
HOUSING
COMMUNITIES

2,275
PUBLIC
HOUSING UNITS

40,597
PEOPLE
(10,149 YOUTH)

- ★ LCF Community Hub
- 🏠 LCF Community Asset
- 👶 LCF Early Childhood Center
- 🏡 Recreation Center
- 🏫 School Based Health Clinic
- 🏥 Baltimore City Health Dept.
- 🏢 Johns Hopkins Medical Campus
- 🏠 Public Housing
- 📖 Enoch Pratt Free Library

COMMUNITY SCHOOLS 3.0



Steven Bingler

Founder & CEO, Concordia Community Centered Planning & Design

“Once we break down those barriers so that we don’t think about a school anymore, we think about a learning community, then I think from an urban design perspective, we can switch the conversation.

In some ways, I think that the notion of schools as seen as a community, in hindsight, we’ve all been working at this for a long time, but we might’ve gotten it backwards. It might be useful for us to think about the community as the center of the school, that the school is everywhere, that it’s ubiquitous.”

Looking Ahead: Community Schools 3.0

The concept of community schools has been part of the American public education landscape for decades, and while the community schools model is currently gaining support from many quarters, it still accounts for only 6 to 8% of America's public schools. Evidence of growing support is demonstrated in a recent report by the Brookings Institution's Task Force on Next Generation Community Schools, proposing a detailed set of recommendations for how the federal government can help grow the community schools movement, including a proposal to create a White House Commission on Next Generation Community Schools.

Reimagine America's Schools joins the growing chorus of community schools supporters and believes that the pandemic, coupled with the stark revelation of inequity and demand for greater inclusion, offers new energy and suggests an opportunity to more broadly define community schools in the coming decade.

For our nation's poorest communities that are often home for many of our most underperforming schools and under-supported students, we need to help foster the development of more complete neighborhoods. Physical and virtual infrastructure knits the fabric of the neighborhood together, and in these communities are often broken or incomplete, creating a climate that is often unable to support or advance the ultimate mission of the educating of their youth.

We believe that community schools can become anchor institutions that can help rebuild these neighborhoods and act as community centers by blurring the lines that separate schools and the neighborhood. By investing in both the school and the surrounding neighborhood we develop, in the words of President Biden, *"...a comprehensive approach to advancing equity for those who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality."*

Reimagine America's Schools advocates a new approach to both community redevelopment and schools, building on the long history of community schools by advocating for a school-centered neighborhood redevelopment strategy we call Community Schools 3.0.

With Community Schools 3.0, the school becomes the hub of a network of physical and virtual learning spaces throughout the community, activating local civic and social groups, churches, youth service organizations, libraries, and other local institutions to create deeper connections and hyper-local learning sites. Architects, technology experts, and the urban design community working collaboratively with educators, citizens, students, non-profits, social service leaders, and others, will take a much more active role in helping to design the next generation of community schools.

Reimagine America's Schools Community Schools 3.0 is built on five pillars:

1. **Blur the lines between schools and community** by physically and virtually integrating the community school throughout the neighborhood;
2. **Embrace the concept of the “15-minute neighborhood”** where most of the services and support needed within the community are within a 15-minute walk or public transportation ride;
3. **Create integrated technology strategies** to connect the entire 15-minute neighborhood and its learning spaces, thereby ever broadening access and opportunity for students, their families, and their neighbors;
4. **Encourage active learning** as an enrichment to traditional classroom learning, and create a pipeline for low-income students to pursue STEM, STEAM, and maker learning opportunities to overcome blocked pathways;
5. **Seek city, state, and federal participation to supplement educational funding** to reach “a comprehensive approach to advancing equity.”

Next Steps: Concepts to Reality

As outlined earlier in this report, for the past several months, Reimagine America's Schools has been engaged in an ideation phase of work, attempting to identify the drivers that will change education and the way we design the learning environment. The content from that work is contained in this report.

As presented previously, those drivers are:

- Designing for Equity & Inclusion
- The Intersection of Pedagogy, Technology, and Design
- Active Learning
- Crisis Preparedness

The Reimagine America's Schools team has now moved into the application phase of our work and will develop strategies that integrate the four drivers of change into Community Schools 3.0, a *comprehensive approach* for school-centered neighborhood and school redevelopment.

Working groups consisting of technology experts, designers, educators, civic leaders, and other key stakeholders assigned to each of these four drivers will move the conversation from the broad and conceptual to purposeful, implementable strategies for cities and schools to apply the Community Schools 3.0 concept in their neighborhoods. And, when the pandemic allows, we will move into the implementation phase of our work and engage directly with local leaders and educators to help bring this comprehensive strategy into reality.



INNOVATION CASE STUDIES AND REIMAGINE AMERICA'S SCHOOLS EVENTS



Emily B. McCann
CEO, Citizen Schools

"I love to think about this notion of justice as redefining school from a singular building. What we've been talking about through this whole conversation is really a community of learning resources.

This notion that there are a set of assets that surround you as a child, which allow you to learn a variety of different things is really exciting. You can belong to a series of different places besides your home and your school, that you have, all of these additional areas in which to learn is really engaging for kids. And it reinforces the sense of belonging that is so important for students' social emotional growth. We've got to think about how we redefine the school environment to be really a community learning environment. And for rural schools we've got to figure out how we are creating that digitally. Even if we can't create it, we can't bring students to a science center, we can't bring students to a library locally, how are we connecting to all of these cultural institutions, all these institutions of learning digitally to give kids that experience? I believe there is sort of justice waiting in the wings, but we've got to do some things fundamentally differently from the perspective of the agency and voice, if that's going to come to pass."

Active Learning on a Budget with Remake Learning

Reimagine America's Schools partnered with Remake Learning to lead 16 organizations and agencies in western Pennsylvania in the design of a variety of learning environments that support 21st-century learning strategies, including STEM, STEAM, maker, and other active learning initiatives.

Each organization received a \$50,000 grant from one of three local foundations to help schools, out-of-school time organizations, early childhood facilities, museums, libraries, and higher education institutions reimagine, redesign, and remake their learning spaces. The \$50,000 grant was to cover the cost of construction for the project. These projects demonstrate that real change can be achieved, even on a very limited budget. Also underscored in this initiative is the importance of the connection between educators and designers in creating spaces for today's learners.

The greater Pittsburgh region has become a national hub for innovative learning. This collaboration focused on the many transformations of classrooms, libraries, and other learning spaces that are the most notable features of this regional learning ecosystem.

Remake Learning is a network that promotes engaging, relevant, and equitable learning practices in support of young people navigating rapid social and technological change. Remake Learning's network is an open group of interconnected, creative, and innovative people and organizations in the greater Pittsburgh region. Their purpose is to spark and share best practices and new ideas, make it easier for neighbors and colleagues to help each other, reduce duplicative efforts in the region, and leverage resources collectively for greater impact. No one organization alone can transform teaching and learning to better serve today's young people, so Remake Learning helps bring them together.

The Blueprint for Learning grant program brought together local, regional, and national partners and experts—including the National Design Alliance and Reimagine America's Schools—throughout the grant process. Nearly 140 organizations applied and 16 were ultimately chosen for the Blueprint for Learning cohort.

The Blueprint for Learning cohort was to embed and embody years of research, development, and practice in learning space design. Cohort organizations were to learn how to operate as a local leader or "hub" for space design, sharing best practices, and learning collaboratively with other organizations throughout the region.

Reimagine America's Schools and Remake Learning convened a Space Design Summit for prospective grant applicants, which was attended by over 200 participants. This was a kick-off for the Blueprint for Learning program and where prospective grantees could start brainstorming their application. Reimagine America's Schools' team led sessions looking at best practices, implementation strategies in learning space design, and new ways to redesign learning spaces.

The Reimagine America's Schools design team for the Design Summit included:

Judy Hoskens, REFP

Cunningham Group

John Pfluger, AIA

Cunningham Group

John M Weekes, FAIA

Founder/Principal Emeritus DOWA

Lennie Scott-Webber, PhD, NCIDQ, AIA Affiliate

INSYNC: Education Research + Design

Kerry Leonard

Reimagine America's Schools

Ron Bogle

Reimagine America's Schools

From the 140 applications, Remake Learning, Hillman Family Foundations, Claude Worthington Benedum Foundation, and The Grable Foundation selected the following 16 organizations to receive \$50,000 grants and become members of this learning cohort:

Allegheny Valley School District

Attack Theatre

B.F. Jones Memorial Library

Bible Center Church

Boys & Girls Clubs of Western
Pennsylvania

The Campus Laboratory School of
Carlow Campus

Center that C.A.R.E.S

Senator John Heinz History Center

HOPE Academy

Human Services Corporation (HSCC)

Monongalia County Schools, WV, North
Elementary

Pittsburgh Public Schools, Brashear High School

Providence Connections

Riverview School District, Verneer Elementary
School

Western Pennsylvania School for the Deaf

Wheeling Country Day School (WCDS), WV

Grant applications included applicant details based on the following questions:

- Values: What are the values of your organization related to learning? How might a new space directly support those values?
- Little Bets: What steps have you taken, no matter how small, that have led you to want to reimagine a space?
- Design Mindset: What questions are most top of mind for you as you think about redeveloping a space? What guidance are you seeking? What do you hope the cohort process will support?
- Students to the Center: How do you imagine young people and other stakeholders of the space (beyond primary educators) could be involved in co-design of a space?
- Learn From: What other spaces have you been inspired by?
- In Practice: Who wants you to transform this space? Is it your leadership? Your students/young people you work with? Your community? You? How can you show us this?

Another component of the grant process was that each of these 16 organizations needed to create a plan to become hubs of professional learning as a resource for other organizations, either in their geographic area or in the kind of content that they focus on. Remake Learning conducted several additional workshops to focus on this aspect of the program and to assist in the drafting of hub plans which became part of the final grant documents.

Reimagine America's Schools ran a Design Institute for the 16 grantees. The goal of the Design Institute was to assist cohort members in creating a vision for their space along with teaching practical design strategies for implementation. At the Design Institute, each cohort member presented their project goals and space, and the national and local team working with cohort members created a design concept for the cohort member's project. The cohort member's team included three or four members with a total of 56 cohort members participating in the 2-day event. Student involvement throughout the process was encouraged; one project was entirely student driven. Documents created during the Design Institute by Reimagine America's Schools' Design Team and Pittsburgh-area architects included diagrams, sketches, images, and narrative to convey the cohort member's educational goals and potential space use in a PowerPoint presentation.

To help support the cohort in becoming a hub for others to learn from, Reimagine America's Schools structured the Design Institute to have four groups, each with four cohort members, two national partners, and two Pittsburgh-area architects. The goal was to create an environment for educators within the cohort to work together and, guided by the Design Team, help each other co-design their spaces. All participants were encouraged to share state-of-the-art approaches to the redevelopment of learning spaces, applicable research, and asset-oriented examples from the Pittsburgh region and around the country.

Reimagine America's Schools' "charrette process" is based on utilizing the skill and talent of a national Design Team experienced in designing innovative learning environments. They are experienced in leading educators in a co-design process to achieve tangible and practical solutions. Design Team members are experienced in leading the Reimagine America's Schools charrette process, engaging teams in thoughtful design discussion, employing design thinking tools, and using graphic skills to explore and document the group's work. For the Design Institute, Reimagine America's Schools Design Team included the following members from around the country.

August F. Battaglia, FAIA, REFP
Education Consultant

Ngozi Brown, AIA, ASID
nob a+d

Emily E. Czarnecki, NCIDQ
JCJ Architecture

Scott Krenner, AIA
Cunningham Group Architecture, Inc.

Kerry Leonard, AIA
Reimagine America's Schools

Philip Poinelli, FAIA, ALEP
SMMA

Sarah Weissman Dirs, AIA
KG+D Architects

Amy Yurko, AIA
Brain Spaces, Inc

Working with a local advisory group, Pittsburgh-area architects were recruited to participate in the fall event and to provide pro-bono services to implement design concepts developed at the Reimagine America's Schools led Design Institute. The local advisory team included:

Patricia Culley, AIA

Bohlin Cywinski Jackson
AIA Pittsburgh

Gwen W. Dakis, AIA

DragonARCH Consulting, LLC

Bruce Knepper

BK Facility Consulting LLC

Alicia Volcy

Studio Volcy
NOMA Pittsburgh

The Pittsburgh-area architects who participated in the Design Institute were:

Kayla Benton

VEBH Architects

Tom Celli

Buchart Horn Architects

Rob Pillar

Architect

Caitlin Delach

BCJ Architects

Terry Oden

Desmone Architects

Budd Mracna

Architect

Dan Engen, AIA

VEBH Architects

The local Pittsburgh-area architects who provided pro-bono services for the 16 projects were:

VEBH Architects

Buchart-Horn

LGA Partners

Studio Volcy, LLC

Joshua D. Lee, PhD & Annie Rantitila,
Carnegie Mellon University

Desmone Architects

Stefani Danes, Adjunct Faculty,
Carnegie Mellon University

Pfaffmann + Associates

Biafore Landscape Development

Moshier Studio

IKM Architecture

Bohlin Cywinski Jackson

AM Architecture

Participation by these firms and individuals was significant and contributed to the success of the program. Their role in the Blueprint for Learning allowed these projects to be realized. Their talent assisting the 16 worthy organizations and the pro-bono aspect of their services helped to elevate the profession of architecture in the community. The collaborative engagement of all participants focused on the learning environment provides rich examples of active learning spaces created on a small budget.

After the Design Institute, the Reimagine America's Schools national Design Team worked remotely with the cohort members and the Pittsburgh-area architects to provide design input to the cohort members and local professionals in support of successful outcomes in the design of the spaces and implementation of the programs. Design concepts were finalized and funding was awarded to each cohort member to begin building out their space.

During 2020, construction started on many of the projects. COVID-19 significantly impacted construction, but many projects were able to be completed.

The 16 projects provide insight into the design of a variety of small budget learning environments that support community-based learning centers, including STEM, STEAM, maker learning, and other active learning initiatives. Also underscored with this initiative is the importance of the connection between educators, students, and designers in creating spaces for today's learners. Reimagine America's Schools and Remake Learning coordinated the efforts of over 300 people to conceive and design these projects. The design talent's pro-bono efforts and the grants from the three foundations provided a significant return on investment and, most importantly, new learning environments that will impact children served by these organizations for many years to come and open others to reimagine their own learning environments.

The impact of the pandemic in changing the future of public education and therefore how we design the places where our children learn led Reimagine Americas' Schools to study four issues that will drive change and how they will affect the future of learning and design. Those drivers are equity, technology, active learning, and crisis preparedness. The Remake Learning projects are the real-world application of the design of small but impactful learning environments; due to the mission of Remake Learning, these spaces already considered some of these drivers revealed during the pandemic. The combination of K-12 and out-of-school time organizations' projects and the cohort hub concept also point to concepts shared with Community Schools 3.0 and the creation of a learning community.

The Moonshot Project with Citizen Schools

Educators work tirelessly to meet the needs of all their students, but the reality is that the systems and structures of American public education were designed for a different generation, different culture, and different economy than those of today. There was a time that public education served our nation well, but our nation's economy and culture have evolved in significant ways, and the ways they have evolved demand a re-examination of the role schools play in the education and future opportunities of our 50 million students. We join educators in the recognition that the current systems and structures of our public education stack the odds unfairly against students of color and those in historically marginalized communities.

We boldly seek to create a new model for public education. We envision an education system unconstrained from the evolution of biased policies and antiquated instructional practices that hold firm in the face of unacceptable results. What does a 2050 education look like in anticipation of a rapidly changing future, and how do we shape the learning environments for that future? What would an education system look like that is the foundation for equitable futures for all students and communities?

If you were to invent public school today, what would it look like?

That is the question that brought representatives of Reimagine America's Schools, Citizen Schools, and Somerville Public Schools together in a series of six two-hour virtual discussions in September and October 2020. The discussions were eye-opening and inspiring for the panelists. Utilizing a design thinking process which redirects fear into curiosity, the group explored difficult questions about change and reimagined school in order to prepare students for their futures and close the opportunity gap for marginalized students.

Phase I of this project was planned around how public schools should be planned and designed to fit all elements of the school: students, staff, curriculum, and time.

- What are the components of a typical education system and which elements are ripe for redesign?
- What outcomes do we expect for student learning?
- What instructional practices will maximize student learning outcomes?
- What aspects of context and culture must be included into the school setting in order to create an inclusive and safe learning environment for all students?
- What is the design for curriculum, instruction, and assessment - what learning activities need to be planned for in the school?
- How does inequality and bias manifest itself in school design?

Participants in Phase 1 of the Moonshot project included:

Citizen Schools

Kyle Conley
Anna Yu
Angela DiPesa

Somerville Schools

Susana Hernandez Morgan

Reimagine America's Schools

Kerry Leonard, Director of Architecture

Reimagine America's Schools Design Team

Leo Gonzales, HKS Architects
John Pfluger, Cuningham Group
Amy Yurko, Brain Spaces
Melissa Rodriguez, HKS Architects
Patricia Joseph, Cuningham Group
Erin Peavey, HKS Architects

Design Team member Amy Yurko of Brain Spaces wrote the following introduction to the project as we tried to capture the energy and thought-provoking discussion the team engaged in.

INTRODUCTION

“It was the best
of times, it was
the worst of
times, it was the
age of wisdom,
it was the age of foolishness...”

- *A Tale of Two Cities*, Charles Dickens

The exquisite first line of a novel can move a reader to deem it unthinkable to set the book down. Why? Great opening lines have power. They can ignite curiosity, inspire interest, and invoke an experience so irresistible that the reader is hooked before they even know it.

Imagine a school that could achieve similar results—where learners are inspired to wonder, where the thrill of new discoveries catapults them into a welcome trajectory of life-long learning.

Now, picture your own school, or a contemporary school in your neighborhood, or even where your kids are enrolled. Perhaps an influential teacher or maybe a friend or classmate comes to mind, or possibly a project or a field trip sparks memories of an experience that will never be forgotten, like the timeless smell of mac and cheese. Does the school in your mind’s eye have the power of a great opening line? Perhaps the potential is there, but for too many of us, the answer is a resounding “no.”

What has kept our country’s schools from achieving powerful learning for all children? Typical responses to this question include many of the attributes of today’s American educational system: a focus on standards, limited funding and financial resources, politics and policy, poverty and inequity, accountability, even the status quo. Each of these roadblocks can weigh on schools, school districts, and the communities they serve in varying ways, and both individually and collectively, they can seem insurmountable.

What if we could reimagine schools to overcome barriers and inspire powerful learning? What would these schools look like? How would they operate? What and how could students learn? How could these new schools ensure that every child's learning needs were met with power and grace? How could this power be leveraged to support and strengthen our communities? Our team at Reimagine America's Schools, in collaboration with Citizen Schools, has taken on these and other questions as we imagine new possibilities and opportunities to reestablish schools as settings for irresistible learning.

Novels, at their best, tap a reader's imagination while engaging their curiosity, focus, and anticipation; so why can't schools do the same? We think they can.



Reimagine America's Schools Events

National Summit

National Summit on School Design:

Reimagine America's Schools: A Blueprint for Equity and Opportunity

During 2020, Reimagine America's Schools brought together educators, architects, technology experts, and policy leaders to study what impacts the pandemic may have on the future of public education, with a particular emphasis on drawing lessons from our collective experience in 2020 and building a vision of how we can work together to reimagine our schools for the future. The Reimagine America's Schools National Summit began to lay out a blueprint for the future.

With a goal of creating a forward-looking vision to build learning communities, the summit focused on designing schools for equity and inclusion, learning at the intersection of technology and design, and active learning as strategies for greater student achievement. The event laid out the transformative idea for the next generation of community schools: Community Schools 3.0.

Forums

Forum 1 - [The Reimagine America's Schools Forum](#)

Reimagine America's Schools assembled a cross-disciplinary forum to address the challenges and opportunities from our experiences during the pandemic and how we might reconsider the design of schools for the future.

Forum 2 - [The Impact of Distance Learning on Education During the COVID-19 Pandemic](#)

Panelists focused on the impact of distance learning during the pandemic and the takeaways that can be applied to future learning models. When we talk about reimagining schools, it would be tragic if we fell back rather than leaned forward after the pandemic. This enormous national experiment exposed the good, the bad, and the ugly of distance or virtual learning.

Forum 3 - [The Future of Learning at the Intersection of Technology and Design](#)

For decades, technology has been a dominant influence in reshaping the way we have approached teaching and learning. And while there are numerous examples of educators and architects that are creating new and exciting school designs that are integrated with technology, the vast majority of schools are designed on a model when the most advanced technology was electricity and blackboards. We are no longer bound by those limitations. But the questions remain: what is the new vision for 21st-century learning environments? How can technology and design work together more effectively to elevate student learning and help ensure greater equity? How does the blending of virtual space and physical space influence the way we think about the design of schools?

This event was co-convened with International Society for Technology in Education (ISTE) and the Siegel Family Endowment.

Forum 4 - [Community Schools 3.0](#)

To launch Community Schools 3.0, Reimagine America's Schools convened a robust discussion by a panel of dedicated educators, designers, youth development experts, and community-based activists who have made enormous contributions to the expansion of the community schools movement over the last twenty years.

Given the changing demographics of the nation's student population (greater minority representation and students with greater needs), this is an opportunity to create an expanded vision for community schools. This initial conversation provided a framework for how Community Schools 3.0 can help reshape public education, close the equity gap, and overcome the racial divide.

Forum 5 - [Education at the Intersection of Technology and Design, an Extended Conversation](#)

The existing school model is anachronistic. Schools were designed for a time when students had to be at the same place, at the same time, to hear the same message. Today's technologies have liberated us from that restriction. Some of the questions then become: what do schools look like? How do we create schools that maximize the opportunity for blending in-person learning and remote learning? How can technology and design work together more seamlessly to create outcomes that, working separately, they can't achieve?

Following a successful forum about learning at the intersection of design and technology, Reimagine America's Schools held an informal conversation to drill down further on the provocative questions raised about school design and the role that technology might play in that design.

Forum 6 - [Creating Places for Active Learning on a Budget](#)

Reimagine America's Schools partnered with Remake Learning and 16 organizations and agencies in western Pennsylvania in the design of a variety of learning environments that support 21st century learning strategies, including STEM, STEAM, maker, and other active learning initiatives.

Each organization received from local foundations a grant of only \$50,000 to cover the entire cost of construction. These projects demonstrate that real change can be achieved on a very limited budget. Also underscored by this initiative was the importance of the connection between educators and designers in creating spaces for today's learners.

This event celebrated these achievements and looked for the lessons learned from creating active and engaging learning spaces on a limited budget.

Remake Learning is a network that promotes engaging, relevant, and equitable learning practices in support of young people navigating rapid social and technological change. Remake Learning's network is an open group of interconnected, creative, and innovative people and organizations in the greater Pittsburgh region.

Forum 7 - [Designing for Equity and Inclusion](#)

Most organizations and institutions typically approach the issues of equity and inclusion as matters for administrative policy, training, or programs. Rarely is the design of the environment considered a strategy for improving equity and inclusion. This is especially true in our public schools.

Reimagine America's Schools, in association with the Siegel Family Endowment, brought together a panel of designers, educators, and technology experts to explore the practical and tangible ways that the learning environment can be designed to create a more equitable and inclusive space for students, their families, and their teachers.

Forum 8 - [Massachusetts School Building Authority Impact on Schools and Community](#)

The Massachusetts School Building Authority ("MSBA") is a quasi-independent government authority created to reform the process of funding capital improvement projects in the Commonwealth's public schools. Three Massachusetts superintendents and the Executive Director of MSBA discussed with Reimagine America's Schools how the MSBA funding program impacted their districts and the design of projects for their communities. In addition, Reimagine America's Schools created a case study exploring how a new design and funding process for schools in the Commonwealth of Massachusetts has had a substantial and real-time impact on the education of over 600,000 students in the state.

Interviews

[Ashley Flores – Collaboration and Community at the Heart of Post-Pandemic Education](#)

Ashley Flores brings a unique, holistic perspective to the discussion about the future of our schools, balancing her experiences in the classroom with those in administration and community work.

Ashley Flores is a Senior Director at the Child Poverty Action Lab (CPAL), a nonprofit organization committed to cutting child poverty in Dallas in half within 20 years. Prior to her work with CPAL, Ashley was as an education strategist at global architecture firm HKS, where she worked to elevate the impact of the built environment for K-12 district and higher education clients. She also served as the Director of Planning and Special Projects at the Dallas Independent School District.

[Ashley Arhart – Artificial Intelligence Can Transform Our Schools](#)

Ashley Arhart discusses the role of artificial intelligence in creating learning spaces and how emerging technologies can be integrated with curriculum and design to create the schools of the future.

Ashley Arhart recently became Principal Program Manager, Ethics & Society at Microsoft. Previously, she led Microsoft's Ambient AI Design practice, working with a cross-disciplinary team to create new-to-the-world physical experiences. Prior to rejoining Microsoft, she was a Principal with Platinion and the Applied Innovation & Retail Lead for BCG's Smart Environments Group where she focused on the future of Built Experience, retail innovation, and responsible ambient AI. Previously, she was the founding Creative Director for Amazon Go, the world's first truly smart store.

Former Secretary of Education Richard Riley – America’s Need to Innovate and Champion Equality

Secretary Riley is known for championing the community schools movement while Secretary of Education. In 2020, Secretary Riley delivered a powerful op-ed in the Post and Courier about structural racism, a timely and relevant piece that highlights the hurdles to achieve academic success by members of underserved communities. In this session, the discussion turned to opportunities to improve public education, universal access, and more equitable outcomes.

Richard W. Riley is the former U. S. Secretary of Education (1993-2001) and former Governor of South Carolina (1979-1987). He serves on the Board at his alma mater, Furman University, and is Advisory Chair of the Richard W. Riley Institute of Government, Politics and Public Leadership there. He has been named Distinguished Professor at the University of South Carolina, and the College of Education at Winthrop University bears his name, as does the College of Education and Leadership at Walden University.

Tony Smith – It’s Time for True Equality in All America’s Schools

Community school as an infrastructure of opportunity, this inspiring conversation focuses on how we can build schools to support greater equity and better student learning outcomes.

Tony Smith is the CEO and founder of Whyspeople, providing strategic advising and executive coaching to leaders working to create thriving communities. Most recently, Tony served as the Illinois State Superintendent of Education. Previously, Smith was the superintendent of schools for Oakland and Emeryville, CA.

Manny Diaz – Using His Bully Pulpit to Transform a City and its Schools

Making transformational changes in bureaucracies is tough - in some ways, they are designed to protect the status quo. Bureaucracies tend to be rule-bound, calcified, and filled with individuals whose power and self-interest are tied to keeping things as they are. This is true in both the private sector and public. So how we make change happen in cities and school systems is of particular interest as we think about reimagining our schools. As mayor, Manny Diaz led transformation in the city of Miami using his bully pulpit to turn Miami’s schools around.

Manny Diaz is the former mayor of Miami, Florida, where he forged his reputation as a national leader on urban design, focusing on sustainability and education. Manny ranks as a high-impact mayor, in the same league as Michael Bloomberg, Richard M. Daley, and Charleston’s Joseph P. Riley; his impact was felt not only in his own community, but in national leadership as well.

Gregg Behr – Reimagining America’s Schools and Remaking Learning

The greater Pittsburgh region has become a national hub for innovative learning with many examples: STEM, STEAM, maker-centered, project-based, and technology-enhanced learning. Gregg Behr is at the center of this hub of innovative learning.

Gregg Behr is the founder and co-chair of Remake Learning. In his 15th year as executive director of the Grable Foundation, Gregg manages a grantmaking portfolio advancing high-quality early childhood education, innovative teaching and learning in public schools, and robust out-of-school-time support.

[Joel Rose – Creating Space for Innovation](#)

Joel Rose has created strategies for introducing non-traditional approaches in public schools and overcoming challenges and opportunities connected with being an agent of change in American education.

Joel created School of One while serving as the Chief Executive for Human Capital at the New York City Department of Education (NYCDOE). That model evolved into a math program called Teach to One: 360, which is now used by thousands of students across the country.

Joel has published articles about personalized learning, innovation, and school models in The Atlantic, Education Nation, and EdTech Magazine. He has spoken at numerous convenings, including the Aspen Institute Ideas Festival; NBC's Education Nation; and the annual conferences for the American Federation of Teachers, National School Boards Association, and National Association of Independent Schools. Joel holds a B.A. in political science from Tufts University and a J.D. from the University of Miami School of Law and is also a Pahara-Aspen Education Fellow at the Aspen Institute.

Other Events

Oklahoma City: MAPS for KIDS

As part of Reimagine America's Schools strategies for change and innovation initiative, this case study in transformation is an example of reform from outside the traditional strategies of school improvement. A small group of civic minded leaders in Oklahoma City was able to build a community coalition that created a movement to change both the core pedagogy and institutional funding patterns to build new facilities.

Citizen Schools Moonshot Project - If you were to invent public schools today, what would they look like?

Citizen Schools and Reimagine America's Schools explored this question in partnership with Somerville Public Schools. Reimagining America's Schools is engaging in a two-phased approach to ideating a reimagined school that prepares students for their futures and closes the opportunity gap for marginalized students.

Phase I of this project tackled how public schools should be planned and designed to fit all elements of the school: students, staff, curriculum, and time. Phase I culminated in a vision document that captures the insights and ideas from these discussions. Phase II will engage the Somerville Public Schools community to participate as collaborative problem solvers and designers. The team of design experts will help scaffold their engagement and lead the school district through a focused design-thinking process.

Conversation on Effective Learning Environments

In cooperation with ISTE, Reimagine America's Schools engaged in a conversation with a group of chief learning officers from around the country about the design of learning spaces for workplace learning, in addition to a focus on design changes for learning post-COVID. The conversation included information on the design of effective learning spaces and lessons learned from designing the next generation of schools.

Design Matters Conference Panel

Reimagine America's Schools' study of the issues that will drive change and their effect on the future of learning and educational design was shared with the Association of Architecture Organizations (AAO) conference attendees. The AAO is a member-based network that connects the many organizations around the world dedicated to enhancing public dialogue about architecture and design.

Next Generation School Design Conference Keynote

Reimagine America's Schools delivered the keynote presentation on Next Generation School Design for the second of a four-part virtual event presented by New York State, New Jersey, and Pennsylvania AIA in collaboration with the NYS School Facilities Association. The audience was made up of architects, facilities directors, contractors, engineers, and school administrators.

The Reimagining School Design series was intended to elevate the role of design in the creation of educational environments through innovative best practices and science-based metrics. This session was an exploration of what schools will look like in the post-pandemic world and beyond. A particular focus was on the enhancement of the learning environment using learner-centered design and developing a collaborative approach involving educators, architects, teachers, facilities directors, and other stakeholders.

Schools as Centers of Community Conference Presentation

Reimagine America's Schools participated in a panel discussion exploring the intersections between communities and schools. Work completed by Reimagine America's Schools on Community Schools 3.0 was included in the conference resource material. This virtual event for architects and school districts was presented by the Association for Learning Environments (A4LE).

Conference goals included strengthening competencies in community engagement, design of educational facilities, and how to advance educational environments to create stronger connections between schools and their communities. Ideas on community schools as a tangible response to inequity, poverty, and improved educational outcomes were explored.

Reimagine America's Schools would like to thank the following individuals who assisted in moderating our events throughout the year

Gregg S. Behr
Remake Learning

Ron Bogle
National Design Alliance

Joshua Elder
Siegel Family Endowment

Ashley Bryan Flores
Child Poverty Action Lab

Kumar Garg
Schmidt Futures

Ted Landmark
Dukakis Center at
Northeastern University

Ani Martinez
Remake Learning

Anne Gadwa Nicodemus
Metris Arts Consulting

Tony Smith
Whyspeople, LLC

Amy Yurko
Brain Spaces

Reimagine America's Schools would like to thank the Reimagine America's Schools and CityAge team members for all their dedicated work throughout the past year

Marc Andrew
Ron Bogle
Miro Cernetig

Isaiah Devon Harris
Max Hirtz
Lauren Lawson

Kerry Leonard
Alexis Nicols
Kevin Sullivan

Image Credits:

Cover:

Top and Middle Images - Photographer Credit: Gerry Chase

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Designing for Equity and Inclusion – Dyer-Kelly Elementary School, Architect: Lionakis, Photographer Credit: Technical Imagery Studios

Learning at the Intersection of Technology and Design – South STEM High School, Architect: Cooper Carry

Active Learning – Brimmer and May School, Architect Perkins & Will, Photographer Credit: Chuck Choi

Crises Preparedness - Florida Ruffin Ridley School, Architect: HMFH Architects, Photographer Credit: Ed Wonek

Change Case Studies – Chicago Jewish Day School, Architect: CannonDesign, Photographer Credit: Dave Burk

Community Schools 3.0 – Courtesy of Living Classrooms

Appendix – Photographer Credit: Gerry Chase

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