

# In a Wildly Changing World, A School Hits Reset

Achievement First Greenfield is what happened when a school network said its best wasn't good enough. A new design comes alive.

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hat do you want to be when you grow up?" used to be a reasonable question. But as automation completely upends the workplace and forces like climate change promise massive upheaval, future careers are anything but predictable. Cathy Davidson, a leading thinker on the future of education, predicted in her book Now You See It that 65 percent of students will land jobs that have yet to be created—jobs responding to discoveries and challenges we have yet to imagine. Schools were not designed to prepare kids equitably for those unknowns. Can they be?

In New Haven, Connecticut, leaders of the Achievement First charter school network are among those trying. The network—seen as a trailblazer among gap-closing school networks and systems—had a humbling wake-up call in 2013 when students scored well below expectations on new assessments linked to Common Core standards. Adding to the injury, alumni data showed college-completion rates of about 50 percent. That's better than the 9 percent average for low-income students nationwide, but not nearly on par with their aspirations.

After swallowing the facts, leaders asked what they would build if they could do it all over again. If they took the best of what they and other schools



Kindergarteners, like their older peers, practice a balanced mix of learning styles: individual (and often computer-based), small-group, and whole-group instruction.



Students at Elm City College Prep in New Haven, Connecticut, take two 40-minute electives each day, like this music class. The hope is that they'll learn the value of practice in pursuit of a goal—and that they'll find joy in doing it.

had learned in 18 years, and merged it with advances in neuroscience, could they keep pace with the blistering speed of change and do better by kids?

After 18 months of designing, planning, and piloting, the result is Achievement First Greenfield, brought to life for the first time this year by kindergarten through sixth graders at New Haven's Elm City College Prep. In the fall, two Greenfield middle schools will open, one in New York City and one in Providence, Rhode Island. On the surface, the model does not blow up school as we know it. Much looks familiar: the building, the extended-day schedule, kids sorted into grades, wearing uniforms. Still, it's a radical shift compared to the network's 31 "classic" schools because of how and what kids learn.

Greenfield is a showcase for many of the big ideas converging in a rolling reinvention of school: the idea that more kids will accomplish remarkable things if we treat them as unique learners—something technology now can assist; that non-academic skills can't be limited to buzzy ideas like building resilience, but must nurture students as confident, powerful individuals; that enrichments are not extras or rewards but fundamental to building a discovery





Elm City makes a point of teaching students to become great note-takers so they can eventually acquire knowledge independently.

mindset; that schools will not succeed unless families and communities shape them and drive their objectives.

The ideas aren't new so much as gaining a critical mass of school leaders and funders willing to make big bets on reinvention. Lindsay Unified schools in the farm fields of central California implemented a district-wide competency-based model, where grade levels are porous and each student progresses at a different pace. One of Minneapolis's highest-performing charter networks, Hiawatha Academies, is shelving its how-to guide and designing, with students and families, a brand-new take on school to open in 2018. A high school redesign competition put on by XQ: The Super School Project drew 700 applicants pursuing 10 awards worth \$10 million each. Facebook founder Mark Zuckerberg and his pediatrician wife, Priscilla Chan, promised \$45 billion over their lifetimes to four areas of need, one being personalized learning.

Thousands of schools and networks don't call their work "redesigns," but they have been driving innovation for two decades and running by iterating, piloting, and continuously adapting to optimize teaching and learning. KIPP, for example, added KIPP Through College in 2008 in an effort to improve college graduation rates. So why this wave, and why now?

The "big ideas" pursued by places like Achievement First are, in many ways, the progression of efforts to solve persistent problems, like opportunity gaps. But they also confront the fact that kids need a new kind of preparation to give them options in an uncertain future.

Take personalized learning. Proponents have long argued it's the best shot at leaving no student hopelessly off track. But for years, educators like Toll were underwhelmed by the computer programs driving it. Now, finally, she and others say the technology is meeting its promise. Or take the idea of giving students rich experiences beyond core academics, like enrichment classes and internships. Many of those opportunities disappeared after policies like No Child Left Behind ushered in an emphasis on high-stakes testing. But educators are bringing them back, heeding communities' calls for schools where students develop social capital and liberating mindsets.

Nonprofit consulting firms are providing some of the research and development long considered fundamental to fields like medicine but lacking in the education sector. Transcend, a national firm whose charge is to accelerate innovation in school model design, led the Greenfield project. They're also collaborating with the New Schools Venture Fund to help 10 other districts and networks—including D.C Public Schools and YES Prep Public Schools—work through their own year-long redesigns.

As the ideas and funding converge, a picture is emerging of what school could look like in a not-sodistant future. Learning would be more self-directed. Technology would be omnipresent, helping teachers and students alike. Students would spend less time in school buildings and would proceed at different paces en route to mastering what the nonprofit Next Generation Learning Challenges calls the four essential competencies: content knowledge, creative know-how, habits of success, and "wayfinding" abilities.

If those sound too jargony, think of the needs this way: More than ever before, adults don't actually know the information that kids will need to know to succeed. So even if we wanted to teach them the "right" set of facts, we can't. Instead, we need to teach them how to isolate problems and find solutions—and, when they fail, how to keep at it until they break through.

Dacia Toll likens Achievement First's experience to Toyota. Throughout the 1980s and 90s, the automotive giant produced two of the world's top-selling cars, the Corolla and the Camry. Still, they decided to invest significant resources into a new model. The result was the Prius, a revolution in clean transportation.

"Our feeling was that we needed to pursue two paths," Toll says. "On the one, you have to keep getting better at what you have in place. But if you only stay in the world of continually improving on the same structures and approaches, that might be too limiting."

### **EXPEDITIONS**

For two weeks at a time, three times each school year, all students plunge deeply into one topic, finishing with a performance or presentation. Students in a design and construction expedition spent a day on the building site of a Yale University dorm. A "community change-makers" expedition paired students with residents of a senior living home to track housing gentrification in parts of the city.

Expeditions are one way for Greenfield students to layer learning experiences atop each other, a strategy shown to boost understanding and retention. So after first graders learned about China in their humanities coursework, their Chinese culture expedition (including daily tai chi instruction) brought it to life.

While early elementary students do expeditions by grade level, students





(Left) Students engage in short bursts of activity throughout the school day. Research has shown this practice increases focus. (Right) For students' daily high heart rate elective, they choose between dance and martial arts.

in grades three to six have choices. Jayden Richards, a fifth grader, chose Wilderness Explorers. Teachers from a local outdoor-education group led the 24 students each day on trips to area parks and forests, rain or shine. Richards, wide-eyed, described learning about forest edibles, like onion grass and a twig that tastes like a Tic Tac. "Just to be outside exploring the wilderness every day," she says. "It was amazing."

#### ENRICHMENTS

Students' two 40-minute enrichment classes daily are no dilly-dally break from core coursework. For their "high heart rate" block they choose between dance and martial arts. To build mental flexibility, they choose between music and STEM Inventions.

Aylon Samouha, co-founder of Transcend and leader of the Greenfield design team, says students are building a growth mindset, "attaching to a practice and getting better at it every day." And it shows. In dance, students study modern techniques, hip-hop, jazz, and ballet. The instructor is an exacting choreographer, shouting "No, no, no, no, NO!" when the students fail to dance in perfect sync to an instrumental version of Salt-N-Pepa's "Shoop." When they finally get it right, she smiles. And the students' pride is genuine.

Students at Achievement First's classic schools learn through enrichments, too, but for less time each day and on a rotating basis, not through the day-after-day practice prioritized at Greenfield.

#### GOAL TEAMS AND DREAM TEAMS

During Greenfield's design phase, the design team invited interested parents to participate. Many expressed how the job of a parent can feel impossible, especially without extra support. As a result, each student at Elm City has a "dream team." Ideally, they include parents, a teacher, at least one mentor—maybe a coach, relative, or pastor—and one classmate, referred to as a "running partner." Instead of traditional parent-teacher conferences each quarter, students lead dream team meetings. Photographs of dream teams line the walls of the school as a constant reminder of their support.

During the week, students meet each day in "goal teams," teacher-led groups of 10 to 15 students who set goals together and work through challenges. The idea is for students to develop life habits, like awareness of their strengths and weaknesses, within a meaningful mini-community. Co-CEO Toll says the network has always understood the importance families play in students' success. But the role of the larger community and, in particular, of peers, "is something we've woken up to."

# PERSONALIZED LEARNING PLUS

For about two hours each day, students employ learning software—some purchased, but most created by the network's in-house curriculum team—to work at their own pace on skills tailored to their academic needs. Individualized learning happens alongside small-group and whole-class instruction, typically in the same space. Picture a fifth grade classroom. On the far side, looking toward the back wall, 15 students face a teacher and a whiteboard. On the near side, looking toward the front wall, another 15 students face a different teacher. Students on the far side are on their computers, headphones plugged in. The teacher tracking their progress on her device calls individuals or small groups together for extra help.

On the near side, a teacher leads students through a complicated math problem. All 15 students are working together, taking the skills they learned through the personalized lessons and applying them to the real world. After 40 minutes, students switch sides.



First-grader KhyRen Jones leads a meeting for members of his "dream team," including his mom, grandmother, siblings, and football coach.

Rahsaan Yearwood (Connecticut '14) is Elm City's lead math teacher for fourth and fifth grade, teaching the whole-group class. He's a guide more than an instructor, anticipating pitfalls and drawing out reluctant participants. Even struggling students can feel successful each day with the computer-based learning, he says, which frees him to nurture a teamwork culture where mistakes are welcome. "It's to the point we almost say thank you for making the





Math teacher Rahsaan Yearwood (Connecticut '14) credits the Greenfield model with nurturing students who, when they get a problem wrong, "know if they try again using different mechanisms and tools, they can probably solve it."

mistake, because now I can grow my learning that much more." On his best days, students have rich discussions about why they fell into various traps. "When you get self-realization in the classroom, now you're humming," Yearwood says.

# SELF-DIRECTED LEARNING

Beyond personalization, the school aims to help students become "self-directed." During the design phase, Toll says alumni shared that when they got to college, they didn't know how to study. At first, she was baffled—she knew they studied plenty in high school. But she learned that in high school, the material they needed to study was all laid out. In college, students said they were asked to learn more than half of the material on their own.

During Greenfield's pilot year, the staff learned that self-direction doesn't come naturally for students who have always had directions to follow. This year, they're teaching it piece by piece. For example, students working on close-reading exercises in ELA begin by using study guides. Throughout the year, the study guides become less structured as students develop the skills to analyze texts independently.

# THE FUTURE

Greenfield is a work in progress. The design team (which includes school leaders, curriculum specialists, and a tech coordinator) still takes feedback and makes frequent corrections. When the school launched, students could work on any of their core subjects during self-directed learning time. That didn't fly—students didn't organize their time well enough to complete their work. Now, they work on self-directed math during math class and self-directed ELA during ELA. Student agency waits while students learn skills that support independence.

Results so far have bolstered the team's confidence. In the pilot year, fifth and sixth grade ELA classes outperformed classic Achievement First schools by significant margins on state exams and nearly doubled the proficiency rate of New Haven public schools. Math scores revealed a significant advantage for Greenfield students, as well. The student attrition rate at Elm City is 1 percent this year. And more than 90 percent of teachers who received offers to return for the 2016-17 school year accepted.

At some point, Toll expects all Achievement First schools to adopt at least parts of the Greenfield model, however it evolves. There's no timetable for when that will happen. "As fast as we can, as slow as we must," she says.

Toll, whose own children attend Elm City, returns daily to the question of whether her students will be prepared for the world that awaits them—a world where they'll both experience and be asked to fix problems no one can yet predict. She takes hope from students like Jeremiah Shaw, a sixth grader in his first year at the school. His father, Alvis Shaw, says Jeremiah entered Elm City well behind his peers. At his previous school, he spent hours on homework, often ending in tears. "I thought this was a challenge I'd be facing for a long time," Shaw says.

At Elm City, Jeremiah is a new student, a happy kid for whom this combination of learning experiences just works. During his spring expedition, Jeremiah studied chess and now takes every opportunity to beat his big brothers at the game. In class, the self-directed computer-based learning—particularly in



Students work through "playlists" developed by the Achievement First curriculum team. They include readings, videos, and recordings related to the content.

math and science—has allowed him to catch up on his skills enough to make sense of the whole-group challenges, which tend to be more fun. At previous schools, Shaw says teachers made sure Jeremiah finished his work, but not that he understood it. "Now," he says, "he's earning everything he's doing."

Shaw says more than anything, he feels like he has his son back—bright, playful, curious. "They have taken a kid who was on path 'B' going the wrong direction and put him on path 'A' going the right direction," he says. And as long as that keeps up, the world's path into an uncertain future has one more light.