ACHIEVEMENT FIRST
A Getting Smart Data Interoperability Case Study

Project Unicorn is an effort to improve data interoperability within K-12 education. We aim to create a community of innovators who make the broader case for secure interoperability by determining shared priorities, educating school systems and vendors about its importance and benefits, creating a demand-side push for interoperability through partnerships, and educating buyers to consider the total cost of ownership through informed comparison of vendors. Project Unicorn does not endorse a specific product or data standard; instead, it is an educational advocacy initiative dedicated to the secure, controlled interchange of data.

Data Interoperability Defined
Interoperability is a powerful tool to transform teaching and learning and empower parents and students with their own data. At the core of interoperability is a focus on better informing instruction and driving toward student-centered learning experiences.

Achievement First operates a network of 32 high-performing college-preparatory, K-12 public charter schools in Connecticut, Rhode Island and New York City. In keeping with its name, the network is centered on a goal of outstanding student achievement. Its rigorous standards, high-quality curriculum and ongoing professional development for teachers serve to support this goal. Teachers regularly analyze student data to drive daily instruction and long-term planning, and an emphasis is placed on building strong relationships with students, parents and guardians.

Since the opening of its initial school, Amistad Academy, in 1999, the network has grown to three states, opening elementary, middle and high schools centered on its “REACH” core values: Respect, Enthusiasm, Achievement, Citizenship and Hard Work. Students are admitted on a lottery basis, with an average of 10 applications received for each seat.

Placement within the network is in high demand because, frankly, the system is working. Closing the achievement gap between students in affluent areas and those in urban districts seems ever more attainable. Achievement First students’ English Language Arts and Math performance in all three states far outpaces that of their host districts, and also surpasses statewide student performance averages.
Baked-In Innovation

Schools are staffed with operations, logistics and technology teams that enable teaching and learning staff to focus on curriculum development and delivery, assessment, and professional learning. Three years ago, the network launched Greenfield, a new school model that emphasizes self-motivated learning with greater access to technology, smaller group instruction, and a variety of enrichment activities. (By the 2017–18 academic year, three network schools will follow this model.)

Archana Parab, Database Architect, leads a “small and mighty” team of developers and database staff who build and refine data connections and design solutions to meet the entire network’s technical needs. She explained that Achievement First employs a variety of assessment platforms: Illuminate is in place for benchmark assessments, while STAR assessments, along with a whole host of other digital reading platforms, are used for reading. The network also piloted and uses Cortex, a next-generation learning platform developed by InnovateEDU.

Prior to adopting Illuminate, the team built a matrix of desired feature sets that included data access and integrations with their existing SIS, and sent out an RFP. They found what they needed for benchmark assessments with Illuminate.

That said, the option to develop proprietary technologies remains an especially attractive one. “We have historically built a lot of things in-house,” added Anthony Nevico, the former Senior Director of Systems and Data who now works for InnovateEDU.

“Our team believes very strongly in being able to build and maintain your own tools—and it has created a massive competitive advantage for us, as that kind of internal capability is still unusual among charter schools.”

Nowhere is this more evident than in the network’s Greenfield program, which demonstrates how schools can be built from scratch. For example, through Illuminate, Greenfield teachers are disseminating weekly quizzes, which offer a variety of benchmark assessments. Lisa Minott, Senior Director of Greenfield Technology, noted that it enables her team “to intervene before an issue becomes a crisis, and we can also subdivide into a week-by-week basis, focusing on two to three items for mastery.” Those assessments feed into Cortex. This interoperability between systems means that interventions are structured and meaningful, and address key gap areas while giving teachers actionable data.

“You take something huge like moving a kid across a couple of grade levels in a year, and turn that into a feasible accomplishment,” Nevico added.

Assessing student mindsets and social emotional learning is still in the beginning stages at Achievement First. Minott noted that meetings with the curriculum design team have begun to determine if reporting on these areas needs to happen, and how it might be implemented.

Professional Development for Teachers

Nevico added that mindsets are considered at the teacher level, however. “We have an in-house tool that helps our teaching staff capture all the skills that need to be assessed, instilling strong scholar behaviors. It integrates informal lesson observations and a coaching platform. Data is compiled so that any areas in which teachers might need to refine are identified within the span of an academic year.”

The network continues to retain talented teachers by creating a defined Teacher Career Pathway, which includes clear performance criteria and a range of incentives, including professional development opportunities, salary increases, and elevated status within the network. “This helps us to identify, promote, retain and support our strongest teachers, and also recognize those who need additional resources in order to be successful,” Nevico said.

Coaching is a central aspect of the Achievement First model; every teacher has goals that are reviewed, and their teaching is observed multiple times per year. Beyond that, student performance data is examined on a daily basis with a bi-monthly internal review.

Although the markets in which they operate vary, the Achievement First team is keenly aware of the importance of their teaching staff. “In Connecticut, the teacher market is small, while in New York City it’s very competitive—and in Rhode Island, the market is somewhere in between,” Nevico said. “The fact remains that if you help to develop teachers, they stay with the organization longer and support better student outcomes in the process. Developing talent is a core priority for us, which has been a key driver of our success. Simply put: stronger teachers lead to stronger results.”

Technology Supports the Personalized Learning Model

While Achievement First’s existing assessment tools currently do not adapt to students’ responses in real time, they offer varied assessments in which each student can move at his or her own pace.

“We do a lot of reporting for various blocks throughout the day: science, humanities, math, etc.—and from that we gather a suite of reports on a specific trend line,” Minott said. “This enables us to set rigorous yet appropriate goals for
every student in terms of proficiency.” The ability to pull data together in an interoperable way means that this trend line deeply informs the core work of the team.

While overall student growth is charted by analytics obtained from weekly assessments, teachers in the Greenfield model also rely upon the Cortex platform to drive personalized learning.

“With our 1:1 model, all Greenfield students have access to a Chromebook, and specific times when they’re learning science, English, and other topics,” Minott explained. “They log into Cortex, where we’ve laid out core content and several ‘go deeper’ modules, which enable fast-moving students to explore a given topic further. Each student encounters a playlist of digital content and activities—whether those involve text, multimedia or simulations—that have been curated alongside a study guide with questions and prompts. If they pass, they can move onto the other playlist.” Students see their progress in real time, driving engagement in the content and exploration of passion-driven and interest-driven deeper dives. Teachers can understand through the data, not only if a student is learning, but how.

Students’ needs are met at all ends of the spectrum. “For those reading below grade level, we can customize down to the student’s level, so that on the surface it looks the same— they’re covering the same topic as their peers—yet it’s a way to reach students with challenges where they are,” Minott said. “The module then serves as a benefit rather than a roadblock.”

“Our model is about transparency. We can support students, pull those who need help for intervention groups, and recognize those who are flying ahead. We’re always thinking about how to serve our kids: can we give fast movers another piece of software to support them?”

Many Touchpoints, One Powerful Community

Many school leaders talk about an unwavering commitment to their students. What that means and how it can be put into practice varies widely, of course. Just what would happen if every adult staff member was committed to student success on a daily basis?

“Our Greenfield model schools are set up so that students have goal coaches and goal teams; for example, every teacher in the building is assigned somewhere between 10 and 16 students for whom they are a goal coach,” Minott said. “This means that they work with this particular cohort of kids both academically and personally. They share experiences, personal histories, and stories. It’s enabled us to build a real, tangible community around each student. They meet every day for 15 minutes.” This goal team data is able to live side-by-side with the interoperable assessment data in Cortex, allowing teachers and staff to get a holistic picture of the student’s academic performance.

The Greenfield model uses a “dream team” concept. Instead of a typical report card, students are asked to select a group of adults such as parents, grandparents, guardians, clergy members or coaches who are important role models to them. Students as young as five (kindergarten students) then present to their dream teams.

“You can imagine, it’s quite an interesting turn,” Minott said. “Our students will speak directly with their Dream Teams about their performance, saying that here I’m advanced, while here I’m not proficient yet. Our model is all about student ownership and agency. It’s fascinating to see their excitement and energy around it… it’s a big difference from simply reviewing a report card.”

Students’ work is also shared and compared in small group-time and seminar discussions, and at Greenfield, student showcases after an “expedition” are encouraged. (Ongoing partnerships with community organizations in areas such as photography, pottery and others enable students to obtain hands-on experience outside of the classroom.)

As key stakeholders in their children’s success, parents and guardians are kept very much in the loop. They can log into Cortex at any time and see their children’s progress, color-coded red, yellow and green to denote level of mastery. The Achievement First and InnovateEDU team is working on developing a parent dashboard within the tool as well, to enable feedback through a series of dashboards that bring together disparate data into a clear, actionable view that enables bi-directional dialogue not only between tools but between the school and parents.

Students in the Greenfield model also receive weekly progress reports, stating their proficiencies and how far they may be from an academic target. In the network’s other schools, traditional report cards and a report card night held in the schools pull a child’s support team into the conversation. The ability to have an interoperable solution in Cortex, which captures data from disparate systems into one view, allows for more real-time weekly updates for students, teachers, parents and the goal team to assess where a student is and how far he or she has to go. This inherently shifts the dynamic from teacher-led to student-led, and leads to more informed decision making.
Constructing an Ecosystem

Whether in the network’s classic schools or in its Greenfield model, innovation continues to be rolled out at Achievement First. “This year, we launched a platform called Curriculum Hub. It’s a custom piece of software that provides daily lesson resources that create scope, sequence and scaffolding for teachers. Instead of spending time figuring out the basics (how to write a lesson and bring the content alive with certain nuances), the software allows teachers to go a lot deeper and drive mastery of content.”

The answer doesn’t lie in a single solution, Neivo said.

“There’s no secret sauce in terms of platform, reports or software; it’s about creating an interoperable ecosystem, developing the right habits and empowering teachers to accomplish lofty goals.”