



UNCONVENTIONAL WISDOM

How a district courageously broke with convention to create new norms for engaging, future-focused learning

Mineola Union Free School District
Nassau County, Long Island, New York



ABOUT THE INNOVATIVE SUCCESSFUL PRACTICES PROJECT

Dear Educator,

Beginning in 2017, the Successful Practices Network (SPN) and AASA The School Superintendents Association have been conducting a study of innovation best practices in public K–12 systems from throughout the United States, with support from global learning company Houghton Mifflin Harcourt (HMH).

Dr. Bill Daggett has led a team of nationally recognized superintendents, researchers, and data analysts to identify systems that are using innovative approaches to put students first by expanding and supporting student learning and achievement. Schools and districts were selected for further study based on a national search conducted by thought leaders and experts at HMH, SPN, and AASA. HMH supported this effort by providing research and reviewers as part of its work to partner with school districts on improving student outcomes.

From that study, 25 national Innovative Successful Practices systems were identified based on their ability to demonstrate rapid improvement in student learning and preparedness through innovative organizational and instructional practices.

Each of those 25 systems collaborated with SPN and AASA to host an on-site visit, detailed data analysis, and development of a case study. These case studies are intended to provide an accessible and nontechnical overview of each innovative approach that is backed up with data-driven results.

The participating systems include a wide range of geographies, demographics, student population, and resource levels. In spite of those differences, each of these systems shares a common mindset that innovation can drive public education with a strong focus on serving the needs of all of their students.

We have been inspired by the lessons learned from these courageous leaders who took risks to think beyond their traditional systems and approaches. It is our hope that this work continues to inspire, inform, and support public education leaders in their efforts to prepare students for success both in school and beyond school.

“The world that our children will live, work, and interact in will be fundamentally different than the world we all grew up in,” said Bill Daggett, Founder and Chairman, International Center for Leadership in Education. “To prepare them for success in this changing world our schools need to make fundamental changes as well. These innovative districts are paving the way and showing us how to make the necessary changes needed in our schools.”

“At a time when the new school year is beginning across the nation, there is no better time than now to speak out about the value of public education and bring to the forefront the outstanding work being done by our school districts,” said Daniel A. Domenech, Executive Director, AASA.

“It’s important to be imagining how our classrooms and schools can look and feel different in the next decade,” said Rose Else-Mitchell, Chief Learning Officer, Houghton Mifflin Harcourt. “We congratulate these change-makers for creating a culture of innovation and the conditions for future-focused learning designs in their school districts to accelerate student engagement, growth, and achievement.”

INTRODUCTION

The courageous and bold leaders and teachers in Mineola Union Free School District in Long Island, New York do not cling to conventional wisdom. To their leaders and employees, just because something has been done a certain way for a long time is not reason enough to keep doing it—especially when student outcomes are not improving and engagement is low. Instead, they embrace a practice of questioning and challenging procedures and systems at every turn, aware that sometimes you need to break a few things to unearth unconventional wisdom about what it takes to engage students in a truly future-focused education.

THE CHALLENGE

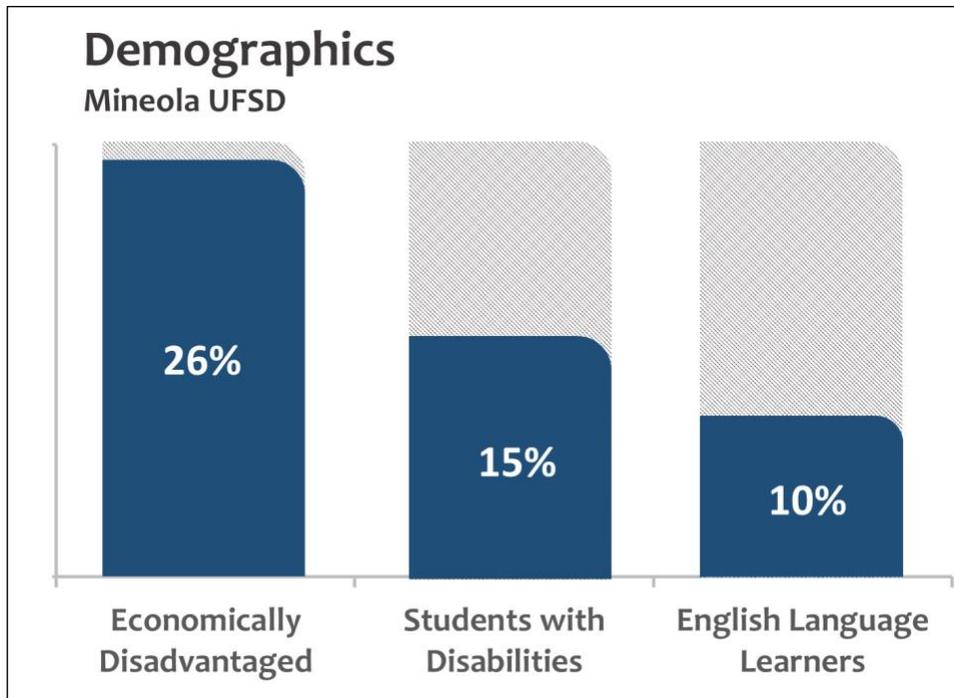
Generally speaking, the 2,900 PreK–12 students across Mineola Union Free School District’s five schools were doing fine. While there were variations from school to school across the suburban school district, average performance metrics and graduation rates had been fine for years—no cause for alarm, but also no cause for jubilation. As the superintendent visited the schools, he could see it on students’ faces—they were coasting. There was little indication that those in the district—neither students or staff—were engaged.

The good news was that the superintendent had been hired to address this very concern. Previously, he was the principal of the district high school. He’d noticed a similar disengagement in that building and set out to do something about it. Under his leadership, student and teacher engagement began to soar. The board moved him into the superintendent role so he could replicate his progress across the district.

Once he was in his new role, he and district leadership diagnosed the drivers of disengagement. They noticed a system-wide lack of emphasis on relevant learning. Teachers were usually not viewing their instruction in terms of students’ futures, and students weren’t being made aware that school was directly relevant to their futures. The takeaway to students was what typically happens in such cases: they were being taught to pass a test and then learn for the next one.

Leadership also discovered a significant digital divide. Located in Nassau County on Long Island, the student population is 26% economically disadvantaged, 15% have disabilities, and 10% are English Language Learners. Relative to neighboring districts, Mineola’s economic disadvantage rate is high. A significant share of Mineola’s students simply did not have access to technologies and internet.

Ultimately, leadership saw an issue of engagement and future-focused learning, and they viewed technology as the path out. Prior to implementing plans, they decided that improvements had to reach every last student. They couldn’t favor some over others; their mantra was all or none.



THE INNOVATION

Breaking out of Rigid Thinking to Break into Untold Possibility

Leadership came to agreement that for Mineola, Common Core State Standards and accountability measures and the New York State learning modules were the optimal path to relevant learning—but getting to agreement was no easy feat. Like so many educators who eschew CCSS for their own curriculum, many at Mineola viewed the standards and modules as too rigid and didactic, fundamentally at odds with creativity. Others were afraid not to use them because they worried test scores would go down.

The superintendent challenged his team to think not in either/or terms, but both/and: How can we apply CCSS and state modules in such a way that they both raise test scores *and* foster future-focused, creative, and engaging instruction? Ultimately, he saw the state modules as a free and equalizing resource, therefore one that should be rigorously evaluated from all angles before being tossed for something that could turn into an unnecessary expense (of time or money) and result in curriculum inequities.

This practice—of subjecting all considerations to both/and thinking and a quest to look for ways to make the most optimal and efficient use of resources—set precedent in Mineola, thanks to the superintendent's habit of following the practice himself. By modeling bold thinking and decision-making that often breaks with convention, he encourages his teams to do the same. By bringing an entrepreneurial mindset to how to use resources efficiently and for greatest impact, he pushes the district to think creatively, even unconventionally, about resources and to always seek new ones—including finding a “new” resource by rethinking an old one.

This both/and thinking and entrepreneurial mindset steadily transformed Mineola's culture, particularly as it led to decisions that began to show meaningful improvements in teacher morale, student engagement, and future-focused learning. This culture, even in its nascent stage, is what enabled agreement around CCSS and state modules. Teachers grew confident this did not come down to choosing between creative instruction or passing test scores. Instead they could have both. The superintendent encouraged all teachers to take risks and push the bounds of the CCSS modules and gave them free reign to innovate them. Innovate they did—the teaching staff, to their great credit, embraced change and, in turn, changed their pedagogy. Together, they have busted the conventional wisdom that to teach CCSS is to teach rigidly and safely.

The backdrop to this decision, and all others, was Mineola's commitment to all innovations reaching all students. To make good on this commitment, the superintendent created a policy that most would say is unwise or too risky: Instead of pilot testing an innovation with a selection of students, he advocates for all innovations to be implemented fully to all applicable students. This policy constantly reminds students and teachers alike how serious everyone is about equity in learning. All students, then, feel cared for and of equal importance to all their peers across the district.

THE IMPACT

Three Key Guiding Themes

To reiterate, three key principles drive Mineola's approach to innovation:

- Any innovation must be relevant and delivered to all applicable students (meaning some innovations might pertain only to middle school students, and it must be delivered to all of them barring extenuating circumstances).
- Teams are to challenge conventional wisdom about industry norms, beliefs, and traditions to break beyond the bounds of either/or and create new ones with both/and thinking.
- Teams are encouraged to challenge conventional wisdom around resource use, resource opportunities, and resource allocation.

From these principles, a range of inspiring, creative, and norm-busting ideas and programs has been born from Mineola's very own educators. What follows are the manifestation of some of their most consequential developments grouped by overarching themes.

Don't Be Afraid to Break down the Old Ways to Build New Ones

Setting out to make dramatic changes in the name of engaging all students in future-focused learning posed numerous budget questions. Committed to rigorously reviewing resources, district leadership looked at how optimally each school was running. Was each school running most efficiently? Was every building needed? Were there other ways to reconfigure schools to operate more effectively as a district? Leadership concluded there were opportunities for a more productive and student-focused use of resources. They decided to close the only PreK–K building in the district and one Grades 1–5 building to reconfigure the entire district as such: two PreK–2 schools; a Grades 3–4 building; a grades 5–7 middle school; and a building with the 8th graders and high school students.

Thanks to a courage and willingness to question something as controversial as the need for all buildings, leadership discovered excess capacity and a new, unconventional configuration that freed up resources.

Funds once directed to now-closed building maintenance and staff could be redirected to a fully equitable learning experience for all kids. The reconfiguration also brought Mineola's diverse community together much sooner than middle school.

The result is a very unconventional grade configuration across Mineola. To adherents of convention, this might matter. To the bold thinkers of Mineola, what mattered is that each student has equitable access to a standards-based, future-focused education—convention or otherwise. And thanks to a similarly bold take on technology, the boundaries and configurations of grades took on even less significance to Mineola's students and teachers.

Realize the Promise of Technologies and Increase Socializing—for ALL Students

For decades, many have promoted technology's great capacity to revolutionize learning. Yet we all know of well-intentioned schools that have adopted widespread technologies and failed to see this great promise realized. There's also a growing chorus of people sounding the alarm on technology's isolating effects on its users. Mineola dared to think otherwise and ask: How can we capture technology's revolutionizing potential *and* increase collaboration and socializing?

The necessary first answer to these questions was that technology must be equitably accessed to leave no room for a digital divide. Every student passing through Mineola is given his or her own iPad. The playing field is further leveled: The district pays for a data plan for any and all students without internet access at home.

Universal technology has revolutionized learning at Mineola in a host of ways, primarily by unlocking a degree of student ownership of learning not previously possible. When a teacher knows every student can access online resources, the teacher can freely use online resources. A key way teachers have innovated and adapted standards-based learning modules is by enhancing them with open source content and numerous apps. Teachers create content through YouTube and iTunes U. In many cases, students complete assignments with video or audio recordings. They solve math problems directly on their screens with their fingers as pens. The breadth of open resources and apps translates into student choice in the modes and methods most useful to their learning styles.

When standards can be practiced and mastered through a spectrum of online resources, learning can also be highly differentiated. If a student has demonstrated mastery through an online standards learning tool and assessment, she is free to progress to mastering the next standard. Students are progressing at their own rates towards proficiency, further decreasing the significance of traditional grade-level boundaries.

Also made possible through universal technology is the universal use of learning management systems. Middle school teachers and students use a customized application, School4One, which provides scaffolded learning experiences tied to standards. The app provides teachers extensive data; they know where each student is in progress towards proficiency, as well as how best to intervene for struggling students. At the secondary level, students and teachers collaborate through the standards-aligned eBackpack software program, which allows students and parents to view each student's learning portfolio.

That students can track their progress and routinely discuss it with teachers—both online and in person—has cultivated a sense of accountability over their learning. Conversations around progress towards goals remind students of the future-focused context of the work they're doing. Knowing that effort today will impact their lives tomorrow keeps these students engaged and motivated by a sense of responsibility for achievement. Frequent data also helps them understand where they're struggling and why so that with their teachers they can devise a plan to overcome setbacks and persevere towards proficiency. They understand that to embrace accountability is also to embrace the joy of improvement.

Technology has boosted social-emotional learning in an additional way—one often surprising to conventional wisdom. Mineola uses a vast array of software and apps to take full advantage of technology's potential. This includes apps that are collaborative in nature. Walk into a Mineola classroom and hear the buzz of constant conversation—*while* students have iPads in hand. Students are working together on projects, brainstorming in groups, sharing tips and tools, or supporting each other as they work individually side-by-side. Universal technology at Mineola has torn down the idea that more technology means more isolation; instead, it has unlocked opportunities for shared work and relationship building. This extends to the student-teacher relationship, as well, since iPads allow more communication; one student remarked, “It seems like my teachers are always with me since I can access my iPad at home.”

A critical driver of Mineola's needle-moving adoption of universal technology cannot be emphasized enough: They keep pedagogy first. Anyone familiar with the failure of the Los Angeles Unified School District iPad rollout knows that simply putting technologies into students' hands guarantees nothing more than iPads in students' hands. It is the pedagogy and purpose behind these technologies that matters. To Mineola, iPads are a tool to enhance and facilitate standards-based instructional strategies, but they are not the instructional strategies themselves.

At Mineola, thanks to the standards-aligned, purposeful adoption of universal technology, students *truly own their learning*.

Make Use of Free Resources that Make Sense for Learning Goals

The superintendent embodies a classic entrepreneurial mindset. He's always on the lookout for people, ideas, and programs that can be a resource to his students and staff. Case in point: Through a chance meeting through his son, he met a man struggling to get his learning management system to teach coding off the ground. To the superintendent, this was not mere chitchat but an opportunity. The two worked out a mutually beneficial plan: The district would serve as the software's pilot testing environment at no cost to the district. The company would be allowed to iterate and improve its software within the district environment using feedback and data generated from devices.

Students in PreK–12 love this coding program, which is an undeniably future-focused asset. They are learning to code in multiple languages and earning badges when completing challenges. In the 2016–17 school year, 448 new badges were created (with 46 of them from Pre-K), and students earned a total of 10,051 badges. One student shared that he'd collected 15 badges across five different coding languages.

The micro-badging platform has been so successful that the district is now working with another software company to pilot a similar program for teacher professional development. Yet another little- to no-cost resource is paying dividends across Mineola.

Give Teachers the Professional Development They Want (Read: Listen to Their Feedback)

Of course, implementing such sweeping changes requires applicable professional development. The old way of coaching teachers wouldn't cut it for readying them for so many changes and the one-to-one technology model. Instead of taking a top-down approach to professional development—which usually results in day-long, one-size-fits-all sessions whose takeaways are rarely implemented and quickly forgotten—district leadership decided to let teachers drive development. After all, who better to know the most effective approach to professional development than the professionals receiving the development?

As a precursor to this shift, the district did away with the rigidity of department heads. When viewed against their goals of high engagement and future-focused learning, such a structure was conventional wisdom that had outlived its wisdom. Instead, the district appointed six instructional leaders charged with planning and conducting professional development for their colleagues. These leaders are on the ground, in the weeds, and in touch with the daily challenges and successes in their schools. They were also responsible for seeking regular teacher feedback for how to improve professional development. Such open lines of communications have been designed to flow back to the district so that leaders can be more attuned to teachers' needs and what is and is not working in professional development.

Thanks to this feedback process, teachers have directly shaped their professional development. Thanks to their openness to change and respect for teacher's feedback, leadership accommodates requests whenever possible. The result is professional development that is delivered in cycles throughout the year and in short, digestible increments that make immediate implementation, feedback, and ongoing support easier.

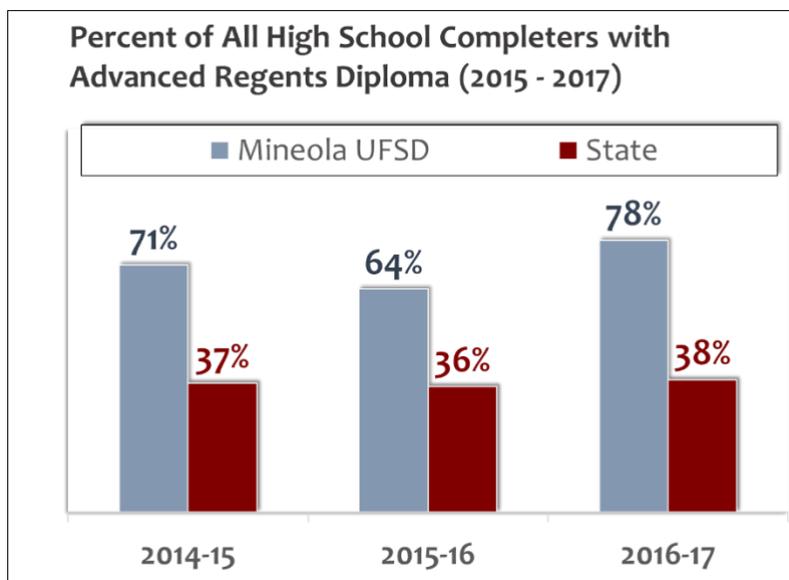
Face-to-face coaching has recently been merged with the online badging system (in ongoing development with the software company). Teachers can acquire individual badges related to professional competencies, which—possible by way of new district policies—can be converted into college credit hours and then factored into salary levels.

Teachers readily express enthusiasm for their professional development. They believe it has become much more relevant, utilitarian, and effective due to the support of leadership and administrators and their willingness to let teachers drive its evolution.

STUDENT LEARNING RESULTS

Mineola's innovative thinking, openness to new ideas, and willingness to embrace unconventional wisdom has led to meaningful improvements in various achievement indicators. The district uses NYS grade 3–8 assessments and pre- and post-NWEA assessments to monitor progress in academic achievement. Test results show continuous improvement and target areas for improvement. Student mobility is 8% in the district and is a challenge to average growth. Half of these students are English Language Learners.

In high school, the graduation rate remains high, and the percent of students earning Advanced Regents Diplomas was almost 80% in 2017. With increased offerings and expectations, more students are tackling college-level courses. Of the 2018 graduating class, 83% will have taken at least one college-level course. This is a 9% increase over the 2017 class.



DISCUSSION QUESTIONS

1. Are we using resources as optimally and efficiently as possible? Are there resources that could be reallocated to more directly and better serve student or educator needs?
2. Where is our thinking stuck in either/or? As a thought experiment, how can it be reimaged or reframed for both/and?
3. What have we been doing for years simply because that's the way it's always been done? Are there ways these things can be changed to improve student outcomes?
4. What conventional wisdom in our district, buildings, or classrooms is in need of questioning or being challenged?

APPENDIX 1: ADDITIONAL TOOLS TO SERVE HIGHLY ENGAGING, FUTURE-FOCUSED LEARNING

In this case study, we focused on the major and overarching ways the district's innovative, unconventional-wisdom thinking has manifested in practice. Walk into any one of their schools and you will immediately observe many smaller ways it is manifesting as tools to promote high engagement and future-focused learning. A selection of standout ones follows.

The Fab Lab

High school students and the 8th graders (who share a campus) take electives or meet yearlong tech requirements, respectively, in the Fab Lab, or fabrication lab. The Fab Lab is housed in a retrofitted industrial arts shop on the high school campus. One half of the room is the computer lab, where students design all kinds of products. The other half is the workspace, which holds the technologies they use to then fabricate their products.

Students might design robots, pre-fab furniture, or custom plastic emojis, to name just a handful of creative products conceived in the lab. They're working in software on PCs while using their Apple iPads to look up videos on YouTube for how to do a function. Once the product has been designed, they can select from several machines to bring it to life. Among other high-tech and computer-driven tools, the workspace has a 3D printer, a laser device that cuts wood and plastic, and a plasma cutter that cuts metal.

The middle school also has its own pared-down version of a Fab Lab, which isn't outfitted with as many high-tech fabrication tools as the high school's Fab Lab. The middle school students use the space to practice working in design software on computers, experiment with robots, and do construction projects.

Learning Commons

In every school, libraries have been converted into exciting student Learning Commons. Gone are the days when Mineola's libraries were quiet centers of reading. Walk into one of their bustling Learning Commons, and you will see students experimenting with robots, discovering new worlds through Virtual Reality, or engaging in coding challenges on a computer or their iPads. Other students have reconfigured movable furniture to play board games or work on group projects. And of course, there are students balancing on Pilates balls or lounging in beanbag chairs as they read good, old-fashioned books.

Campus Green Screens

Mineola views videos as an effective, low-cost means to engage students and to communicate with teachers and staff. On each campus, you can find one wall painted totally green. This is each school's "green screen," where educators can make videos to post to the district's YouTube channel or share as an open resource with students.

In keeping with his commitment to creative and low-cost resources, the superintendent has begun asking juniors and seniors to make content videos for the younger grades.

