



2017 IMPACT REPORT

NEW TECH NETWORK SCHOOLS

Preparing all students to graduate college and career ready

NEW TECH HIGH SCHOOL STUDENTS:

Research and measurement play a central role in supporting New Tech Network schools. We conduct research and partner with external experts to document evidence demonstrating the impact of the New Tech school model. Detailed information on key research findings can be found on pages 25-26.



ATTAIN 92% GRADUATION RATE, 9 PERCENTAGE POINTS HIGHER THAN THE NATIONAL AVERAGE

NTN SCHOOLS HAD A HIGHER HIGH SCHOOL GRADUATION RATE OF 92% COMPARED TO THE NATIONAL AVERAGE OF 83%.



PERSIST IN COLLEGE AT A RATE OF 82%

THE CLASS OF 2014'S PERSISTENCE RATE ACROSS ALL INSTITUTION TYPES IS 82%, COMPARED TO THE NATIONAL AVERAGE OF 78%.



GROW 52% MORE IN CRITICAL THINKING SKILLS

USING THE COLLEGE AND WORK READINESS ASSESSMENT, NTN STUDENTS CONSISTENTLY DEMONSTRATED AN AVERAGE GROWTH OF 52% MORE THAN THE COMPARISON GROUPS OVER THE LAST 3 YEARS.



SCORE HIGHER ON ACADEMIC MEASURES AND EMPLOYABILITY SKILLS

STUDENTS WHO ATTENDED DEEPER LEARNING NETWORK SCHOOLS REPORTED HIGHER LEVELS OF INTERPERSONAL AND INTRAPERSONAL COMPETENCIES SUCH AS COLLABORATION, ACADEMIC ENGAGEMENT, MOTIVATION TO LEARN, AND SELF-EFFICACY.



OUTPERFORM ON COLLEGE ENTRANCE AND END-OF-COURSE EXAMS

NTN 9TH GRADERS OUTPERFORMED COMPARISON STUDENTS ON EOC MATH AND EOC ENGLISH LANGUAGE ARTS EXAMS, AND NTN 11TH GRADERS OUTPERFORMED COMPARISON STUDENTS ON ACT COMPOSITE SCORES.

In every part of our country we find parents, educators, policy-makers and students hungry for meaningful and relevant public education. Too frequently, public discourse about education is dominated by accusations centered on what is “wrong” and who is to “blame” for public schools failing to meet students’ needs. I’d like to think that the partnerships New Tech Network has built, and those just beginning, serve as proof positive that public district innovation can happen and is happening in every type of community across a majority of states.

The New Tech Network (NTN) of nearly 200 schools in 28 states serves as a powerful counter-narrative to the perceptions about what is wrong with education. Indeed, our aspiration is to build schools that make us a nation proud of its public education; bringing deeper learning to all students. The New Tech elementary, middle and high schools, now serving more than 72,000 students, make the point that re-imagining teaching and learning is not just a new idea waiting to happen or a school model that only works in some communities with selective conditions.

I am lucky because I get to travel extensively and visit many New Tech schools. In each school I encounter collaborators, communicators and problem solvers, and I’m referring to both teachers and students. We believe that becoming great at designing and delivering deeper learning for all students starts with building a positive and collaborative school-wide culture. This means shifting away from traditional education practices and implementing student-centric learning that focuses on multiple ways to assess student performance. Our role in school transformation is to provide the support and resources necessary to help teachers become designers, facilitators and coaches to each student through rigorous Project Based Learning. Additionally, we support school leaders who redesign their systems of professional development, helping to build internal systems organized around learning and development instead of accountability. One of the newer dimensions to our work is supporting key district-level roles so that the central office becomes a member of the school leadership team, to assure the focus and support offered to school leaders is based on developmental phases of school development and growth.

The 2017 Impact Report serves as a way to spotlight the learning and growth taking place across our vibrant network. We welcome the opportunity to share



what we are learning together. Schools are individual organisms and each engagement is tailored to meet the needs and support the vision led by its community. We don’t arrive with a scripted playbook; we utilize the proven school model as the center of our work and adapt the design principles to what the district and school leadership envision. Some of our schools are theme-based; focused on STEM, Global Citizenship, and Career Paths. Other districts see the New Tech model as a powerful way to meet the needs of all students by preparing each student to be college and career ready.

We are committed to our own learning and improvement. Our research, development and innovation initiatives are made possible by the generous support from our philanthropic partners. Together, we are bringing improvement science into our work with established, mature schools, designing a new elementary school model based on literacy research and piloting new ways to assess student growth. I have come to treasure and value learning in my professional life in ways I wish all students could experience in their K-12 journeys. That’s why each of the staff here at New Tech Network is committed and energized by our work and excited for the tremendous opportunities we see to impact the lives of students in our schools.

LYDIA DOBYNS
PRESIDENT AND CEO

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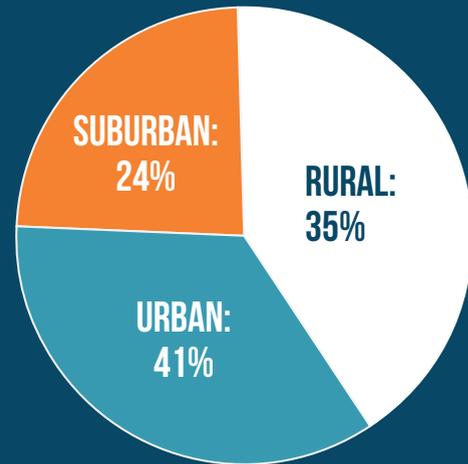


BUILDING A VIBRANT, PERPETUALLY IMPROVING COMMUNITY

The first NTN high school opened in Napa, CA, in 1996. There are now nearly 200 elementary, middle and high schools in all stages of implementing the New Tech school model.

Our success in replicating the New Tech school model led to growing demand to adapt the school model and our support services for diverse communities across the country. We now have a network that represents a myriad of implementations: new school, academy within an existing school, school redesign, urban, rural, suburban, neighborhood schools and schools of choice within public districts and charter schools.

A DIVERSE NETWORK OF SCHOOLS



A DIVERSE NETWORK OF STUDENTS

STUDENTS	TOTAL NTN STUDENTS	SMALLEST IN ANY SCHOOL	LARGEST IN ANY SCHOOL	K-12 STUDENTS ACROSS THE U.S.
AFRICAN AMERICAN	23%	0	100%	16%
AMERICAN INDIAN	1%	0	37%	1%
ASIAN/PACIFIC ISLANDER	4%	0	49%	5%
HISPANIC	27%	0	98%	25%
WHITE	42%	0	99%	50%
MULTI-RACIAL OR OTHER	3%	0	16%	3%
MALE	52%	37%	87%	51%
FEMALE	48%	13%	63%	49%
ENGLISH LANGUAGE LEARNERS	10%*	0	73%	8%
SPECIAL EDUCATION	11%*	0	38%	12%
FREE AND REDUCED LUNCH	60%*	0	100%	51%

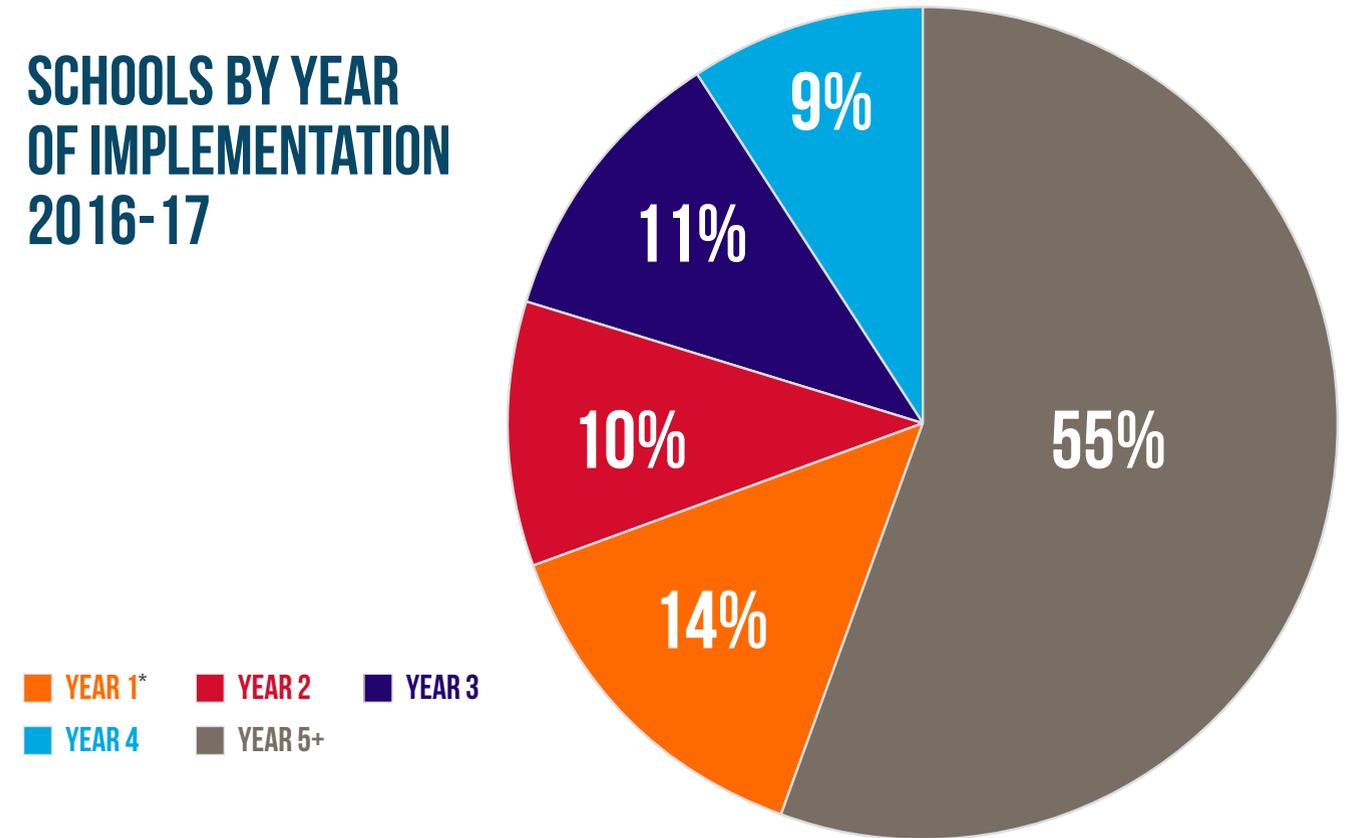
*English Language Learners, Special Education and Free & Reduced Lunch are calculated at the school rather than the student level.

A GROWING PARTNERSHIP OF SCHOOLS

NTN first engages with a district in planning and design, followed by the implementation phase that includes adding grade levels over a multi-year period. Once schools complete their initial engagement, the focus shifts to continuous improvement. As our network has matured, we now offer differentiated supports and services aligned to a spectrum of school development. More than half of the almost 200 New Tech

schools have completed the model implementation. Working with mature schools has enabled us to deepen our work beyond model replication and to specifically target leadership development, sustainability, and improvement science processes.

SCHOOLS BY YEAR OF IMPLEMENTATION 2016-17



Supporting a large national network of educators provides NTN school coaches numerous opportunities to look across our work and identify patterns and trends in school innovation. These patterns can be seen most clearly when we consider the role student assessment plays in our schools. Given a focus on systems alignment and the critical role assessment plays in anchor-

ing school and classroom practice, shifts in assessment practices punctuate the key instructional practice changes we see as essential to support school growth and improvement. Each of these changes involves turning attention to new aspects of effective assessment practices while building the requisite skill and will among classroom educators and school leaders.

*Values do not total 100 due to rounding

ORGANIZING FOR LEARNING

Aligning School Purpose to the Graduate Profile

Our work with school teams begins by asking them to step back, to consider the larger purpose for their school, and to commit to the highest aspirations they have for their students. This requires school staff to zoom out and examine the broad set of knowledge, skills and attributes they hope for in an “ideal graduate.” Making these aspirations clear and concrete creates collective ownership of school-wide learning outcomes in addition to academic attainment. The graduate profile also serves to identify changes they will need to make in the student experience generally, and in the instructional practices specifically, to help develop those essential student skills.

Predictable Phases of School Development

Within the New Tech school model, adopting project based learning (PBL) is the significant instructional shift that will put schools on the path to producing their ideal graduate. Schools who adopt PBL as the primary and pervasive mode of instruction and who align their school purpose to their profile of a graduate embark on a predictable journey of instructional and cultural shifts centered around adult learning.

Not surprisingly, student work itself is a key driver for adult learning and improvement. Increased use of embedded performance assessments within PBL – assessments that are authentic, complex and oriented around higher-order thinking, in a strong, collaborative professional culture – are the early hallmarks of a key pivot in the development of a school.



HOW OUR SCHOOLS IMPROVE

We believe that regular and consistent cycles of inquiry, when involving an entire school team, lead to a culture of continuous improvement. Schools select specific student learning challenges they want to improve and then embark on focused cycles of inquiry devoted to gathering and analyzing data to inform strategies to test; thus begins an iterative cycle of improvement directed toward a specific student learning objective.

We also know that even with these shifts in instruction, culture, and focus, schools can plateau. To support schools into the next phase of development, schools are asked to shift from individual classroom educator work to collaborative growth and calibration. This shift can be aided by teachers who regularly look at student work products and performance assessments together in order to improve their practice and student growth. NTN uses the Looking At Student Work (LASW) protocol from the National School Reform Faculty (NSRF) for this purpose.

Calibration to External Standards

Disciplined and ongoing investigation of student work that targets intentional support strategies is key to improvement and internal learning. Other steps to

school growth include calibration to a set of external standards for quality work, increased authenticity within projects, and impact through community partnerships and connections. It is in this phase of school development that schools can be sure they have a solid process through which to systematically learn and grow.

As our schools increase their focus on the quality of meaningful student work products as their main driver for internal learning, natural questions emerge around which relevant standards serve as anchors in assessing quality student work. Starting in 2012, New Tech Network collaborated with the Stanford Center for Assessment Learning and Equity (SCALE) to further refine our student outcome rubrics and associated practices. This work fundamentally altered core NTN practices around assessment design, collaborative learning from student work, and calibration to a clear college-ready standard.

As more of our schools engage in student work analysis and calibration, we see increased opportunities to engage in calibration work across school teams. We view this work as supporting internal school improvement, while also creating proof-points of effective school practice.



EL PASO INDEPENDENT SCHOOL DISTRICT — PUTTING STUDENTS AT THE CENTER

Thirty-five percent of New Tech schools are in the first three years of implementation. For many schools, this is an intense period of professional learning for students and educators alike. This includes developing a clear set of student learning outcomes consistent with skills required to succeed in college, career or civic life. Content mastery is tied to state standards and projects include collaboration, critical thinking and oral and written communication skill development. Schools work towards courses that demonstrate rigorous and relevant project based learning (PBL) to amplify deeper learning while engaging students in the classroom.

The El Paso Independent School District (EPISD) wants every student to graduate as a knowledgeable and engaged citizen, ready to innovate and drive the area's robust, bicultural economy. Superintendent

Juan Cabrera recognized that for students to reach their potential and face a post-secondary life with the knowledge, skills and competencies to be successful in college or career paths, the EPISD schools needed more than incremental improvements — the entire district needed to commit to a comprehensive approach that put learners firmly at the center.

In 2016, El Paso opened six New Tech middle and high schools. Each school has a specific theme and serves a diverse student population. While the work in EPISD is early, changes are evident in school culture and engagement across the schools.

In 2017, El Paso ISD opened the Young Women's STEAM Research and Preparatory Academy and Grizzly New Tech at Guillen Middle School.



Cougar NT @ Franklin High School

Cougar NT teachers are taking ownership of their professional learning communities. They are intentionally placing an emphasis on strengthening their adult culture to positively impact student learning.



Cobra NT @ Canyon Hills Middle School



Canyon Hills is listed in the top 25% of similar schools in Texas in closing the achievement gap of its students. Proving that learning can also be fun, students are experiencing interesting and engaging projects. In the role of archaeologists, they are creating a museum of artifacts from around the world.

Panther NT @ Austin High School



Service pathways are a focus at Panther New Tech where fire, EMT, police and judicial electives bring real-life application to classes. Attendance is high (over 90%) at Panther New Tech, according to director Blanchie Genano.

"We are pleased with our New Tech Network partnership; together we are creating powerful and engaging learning opportunities for middle and high school students throughout the district. The EPISD New Tech schools serve as great examples of community engagement, relevant project based learning and exemplify the vision of the EPISD 2020 Plan."

— Superintendent Juan Cabrera
El Paso Independent Schools District



New Tech Leadership Academy @ Brown Middle School



New Tech students are working as business owners who are designing and furnishing hotel rooms as they learn about budgeting, ratios and percentages. They also take classes that are integrated into unique combinations (Words of the World, Art of Science) to expand and enhance their holistic understanding of education. Projects are focused on real-world applications.

Rocket New Tech S.T.E.M. @ Irvin High School



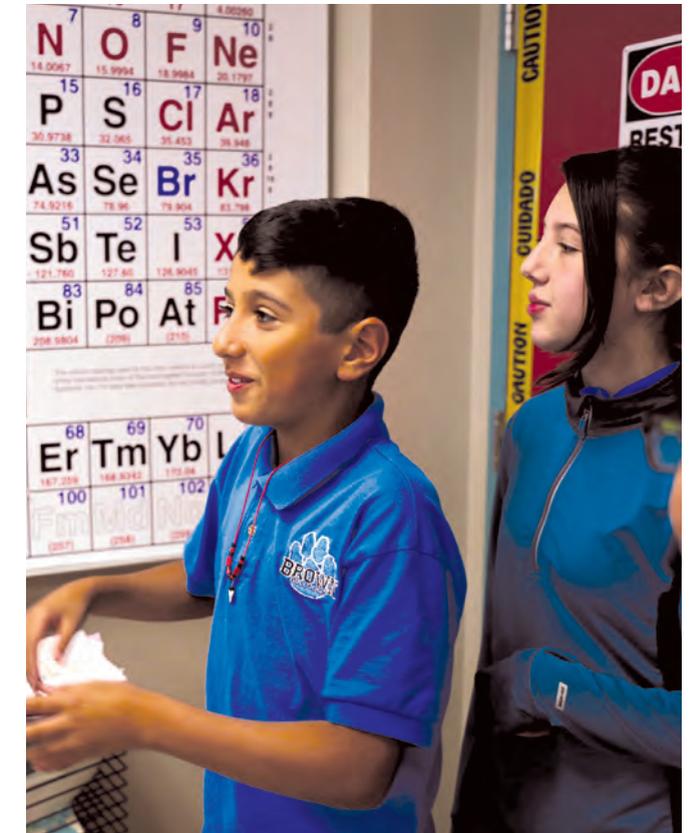
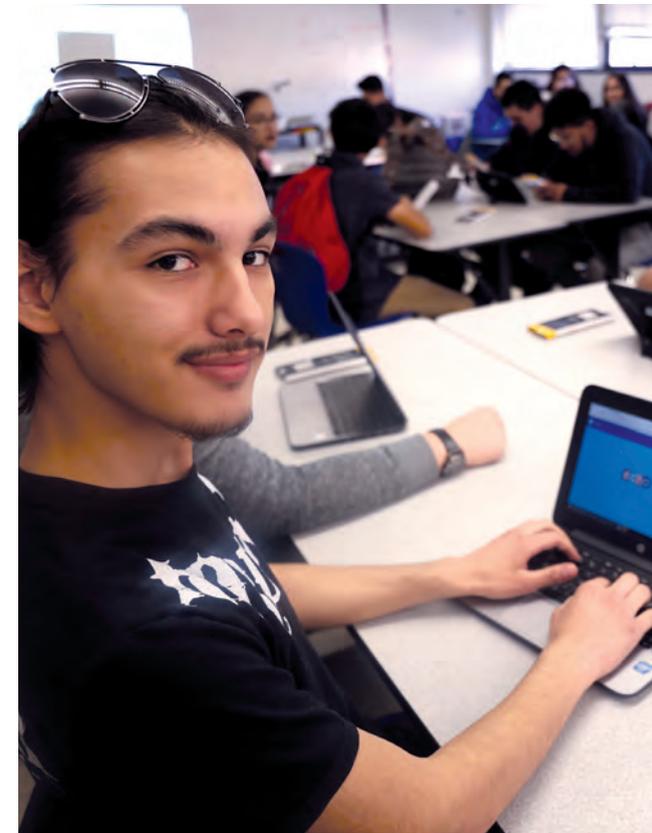
At Rocket New Tech, students dive deeply into classes focused on Science, Technology, Engineering and Math. Integrated classes like English and history combine to create World Studies where students see how ideas are connected. Teaching in such a contextual manner promotes collaboration, critical thinking, and knowledge retention.



Oso New Tech @ Bowie High School



Teachers and leaders at Oso New Tech are working to deeply strengthen literacy at this predominantly Spanish-speaking school. Through engaging projects, including the first Oso Filmfest, teachers are working to close the opportunity gap.



NT ACADEMY @ ALICE ROBERTSON — A YEAR OF ADULT LEARNING

NT Academy @ Alice Robertson Junior High School (7th and 8th grades) focuses on continuous learning for its students and teachers

The Academy was founded three years ago through a joint partnership between the Muskogee School District and the Muskogee Creek Nation. The tribe saw the benefit of project based learning (which supports and encourages meeting the needs of individual students) for the Native American students, as well as the community and district overall.

Maintaining, promoting and celebrating the special culture of the school population is a primary goal of the Alice Robertson teachers and staff. Projects, designed to honor the Native American population, are shared throughout the Creek Nation.

A Year of Learning

In their first year team-teaching American Story, a combination English and History class, Claudia Garde and Melissa Million rolled out multi-faceted projects that focused on skills like communication, agency and oral and written communication, partnered with a deep understanding of content knowledge. The duo exercised adult agency to roll out successful and engaging student projects. Westward Expansion was the first project they worked on as team teachers.

Mrs. Garde started as a New Tech teacher at the beginning of the 2016-2017 school year, and Mrs. Million joined in January of 2017. According to the duo, there was very little time to prepare to teach together. By jumping straight into this project, they developed

ways to communicate with one another and created a vision of what they could do in future projects to ensure students were learning at a deep level.

“We have already begun to look towards the next school year and to take our projects to the next level,” said Garde and Million. “It was amazing to see the level of engagement in our students. They were present and excited almost every step of the way. We know that community partners are a valuable resource that we plan on utilizing. We can see multiple ways to include the Creek Nation Tribe and surrounding community in all of our projects.”

The Indian Education Department brought in several members of different tribes, including the Creek Nation, for a Cultural Day during the project that dealt with Westward Expansion and discussions about the Trail of Tears.

Driving Question at Project Launch:

How can we as historians gain a deeper appreciation of history by exploring multiple perspectives of Westward Expansion in the United States and the idea of Manifest Destiny?

Project Snapshot

In this junior high project, students confronted historical perspective of the Westward Expansion and developed deep critical thinking skills as they compared various accounts in order to discover historical cultural bias. For example, the Indian Removal Act could be shown from the perspective of a Native American, the perspective of an African American, or other religious perspective and then be compared to the perspective of the U.S. Government.

Student Outputs

Students strengthened digital literacy using various media to create display boards, websites, graphic novels, infographics and video stories while developing oral communication to best present their chosen historical perspectives. Presentations included the Gold Rush, the Trail of Tears, the Indian Removal Act and more. For some of the presentations, students talked to experts or brought in guests. One group interviewed a judge about Plessy v. Ferguson.

Student Outcomes

New Tech Learning Outcomes (NTLOs) are a set of research-based outcomes aimed at preparing all students for post-secondary success. These outcomes reflect the knowledge, skills, and dispositions that are needed for lifelong academic and social success. NTN students learn disciplinary knowledge and skills to conduct inquiry and solve real-world problems. Throughout a project, they collaborate with peers, facilitators, and experts in the field. Students demonstrate their learning through oral and written communication for authentic audiences. Ownership of their learning experience and engagement in relevant and challenging tasks helps students develop a sense of agency, a skill essential to success in college, career and civic life.

In this project, students were encouraged to learn about historical events through photos; they also were asked to see how the photographer may have embedded a deep sense of cultural perspective through a photo. Students were instructed to think critically as they researched their chosen perspective. In this way, students learned agency or the ability to demonstrate ownership over one's learning.



DESIGNING THE NEW TECH ELEMENTARY SCHOOL MODEL

Early New Tech schools form a design cohort

Our work with elementary schools is a natural extension of our work with middle and high schools throughout the country. Recognizing that literacy development is critical in the early school years, New Tech Network has relied on research and the expertise of elementary school practitioners to create an Elementary Spectrum of School Development that outlines what makes New Tech elementary schools unique and how they develop over time into thriving, sustainable learning environments that meet the needs of all students. A

few schools meet periodically as a cohort to reflect on the Spectrum and give the Network feedback on its accuracy and feasibility.

NTN invited three elementary schools to become a design cohort to provide input into the school development framework, to share best practices and to collaborate on powerful PBL. The elementary cohort has focused on the areas of student and adult culture and on building positive, sustainable, and outcome-focused school environments. During the academic year, they shared bright spots of key strategies that had helped improve their school's culture in a positive direction.

Katherine Smith Elementary



San Jose, CA | @KSmithSchool
Bright Spot: Circle of Trust

Purpose:

Establish a safe environment so that students and adults feel a sense of equality, safety, trust, responsibility, connection to each other, and ownership to support social emotional growth. The goal is to be a school community that is empathetic and responsive to the deeper issues we face.

How:

Step 1: Establish circle norms

Step 2: State questions or response topics

Step 3: Use the talking piece to either sequentially or non-sequentially share ideas, reflections, feelings, solutions, questions, etc. to participate in the conversation

Step 4: Adjust purpose of the circle as needed — opportunity to be responsive

Napa Junction Magnet School



American Canyon, CA | @NJStaff
Bright Spot: Building Leadership Capacity

Purpose:

To build leadership to ensure sustainability of the work and school model and to build a system of action-research, driven by interests and needs of staff which will enhance teachers' knowledge, voice and confidence in facilitation skills.

How:

- Define top 2-3 needs and divides staff to serve on a committee that addresses one of the needs.
- Committees are facilitated by school leaders who understand the dual purpose of each committee — deepen knowledge and build leadership. The committees meet regularly to define specific needs and plan a professional learning activity for staff. Each committee takes responsibility for a specific Professional Learning (PL) and plans accordingly.
- On the day of the PL, the entire committee has a shared responsibility in leading the training. The committee members then play a key role on their grade level team for applying and extending the PL.

Washington Discovery Academy



Plymouth, IN | @WDAPlymouth
Bright Spot: Building Capacity in Support Teachers

Purpose:

To build a unified culture that celebrates the professionalism and value-added benefits of all staff members including a focus on educator agency and dedicated time for professional development.

How:

- Regular time to meet with aides
- Survey to identify needs-based learning of team
- Time for classified staff to meet with NTN coach to build background knowledge and connection to the Network
- Shift of language to "support teachers" instead of "aides" or "classified staff"
- Evolution of meetings from feedback/listening to active learning and problem solving
- Shift to give ownership of their own role and schedule to support student needs

A POWERFUL LEARNING NETWORK

The NTN Assessment Improvement Community

Mature New Tech high schools in Indiana, Ohio and Michigan joined together to focus on improving their student assessment efforts. Facilitated by NTN, the leadership teams from eight schools met regularly and employed improvement science methodology to develop more effective assessment practices.

Calling themselves the NTN Assessment Improvement Community (AiC), participants reported stronger local professional development efforts, more powerful formative assessment practices embedded inside project based learning, and increased interest in graduation defense programs to support college and career readiness for all students. The results of this regional approach to learning together shows great promise, and NTN plans to expand these efforts with other focus areas across the country.

New Tech Academy @ Wayne High School



Wayne has used their participation in the AiC to explore a robust student portfolio and defense as part of their model. They visited an Envision Design Studio this May and plan to roll out their new process this coming year.

Belleville New Tech



Belleville has pursued staff-wide learning around formative assessment using insight and resources from the community. They have also made strong use of improvement processes by developing some of their formative assessment practices in a "lab classroom" before scaling them to additional classrooms.

"Like every school, academic growth is important to us. However, even more important, is the responsibility we have to foster a civic-awareness in our learners. Helping them transition from young adults to professionals with integrity is something our community and world needs. What I like most about the iCard system is how it encourages students to consider their actions. It also requires them to find people who can testify on their behalf when they wish to advance in responsibilities earned. In fact, to move to the top level, learners must speak to our entire student body about an element of integrity, the importance of that element, and how they demonstrate the quality. Our learners have become proud to speak about their integrity which is an amazing thing to see."

– Jerry Holtgren, Niles New Tech Entrepreneurial Academy

New Tech Institute



NTI has been intentional about using the AiC as a way to elevate the work of their leadership team and to create an improvement focus for their internal work and learning.

Weidner School of Inquiry @ PHS



WSI has used their work in the AiC to explore a personalized approach to staff professional development while staying connected to focus areas for improvement.

Niles New Tech



NNT has developed an exciting student integrity program featuring student Ignite talks, community connections and scholarships, and levels of achievement for students to recognize their growth in personal integrity.

"Taking part in the AiC has provided a focus on our organizational learning for the year. We are putting as much effort into personalized adult learning as we are in student learning.

We believe in order to model the importance of voice and choice and ownership of one's learning, we must design our adult learning around these important pillars of growth."

– Jennifer Felke, Co-Director
Weidner School of Inquiry @PHS

PROVIDING DISTRICT PATHWAYS

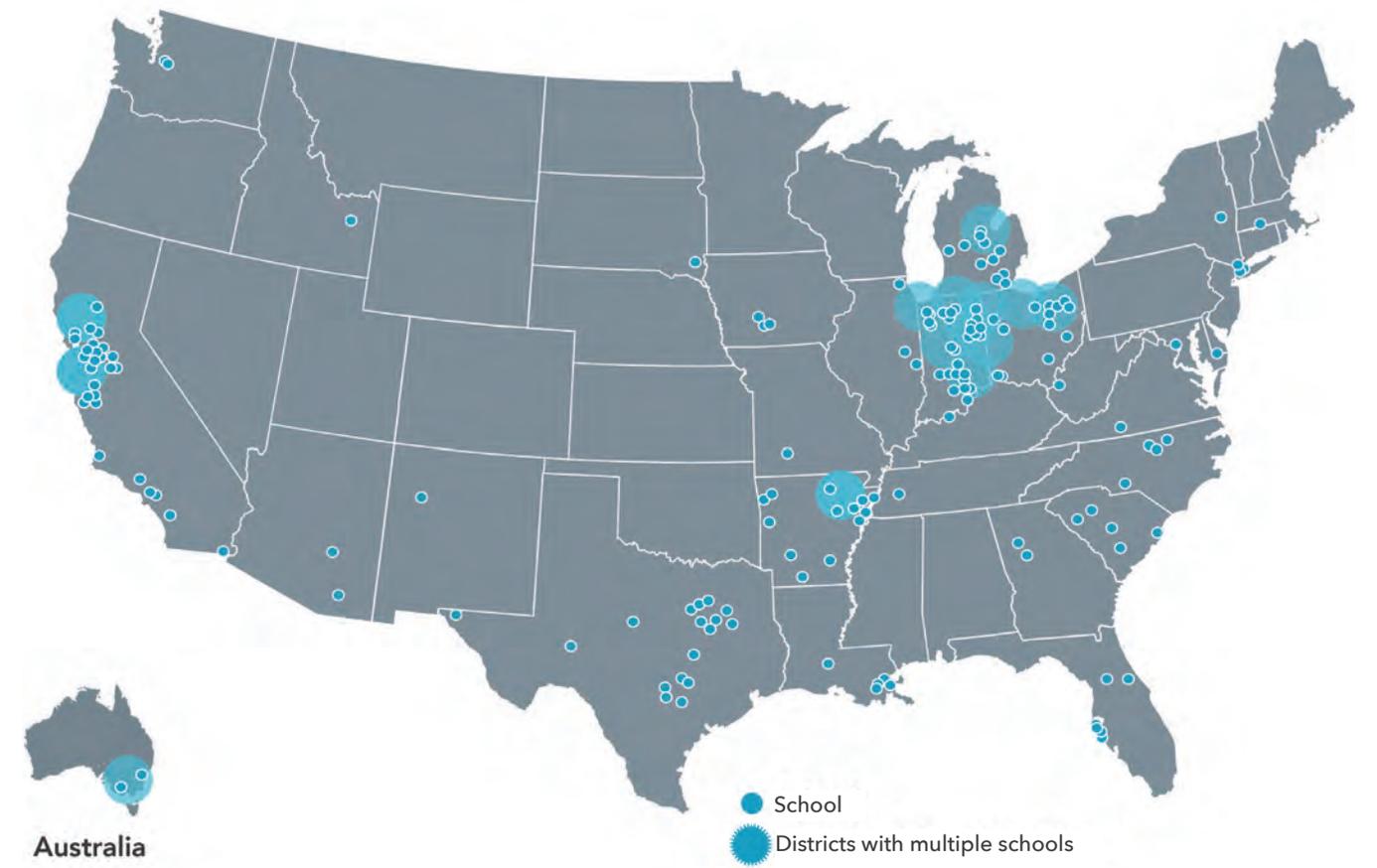
Historically, we have supported the school as the key system and unit of change in public districts. Starting four years ago, district leaders began approaching NTN to consider ways to support spreading New Tech practices across more schools within their districts. This began organically with districts where we had established a successful New Tech school and district leaders who wanted to expand deeper learning opportunities to more students. Today, we are engaged with more than a dozen districts to re-imagine teaching and

learning across entire systems. Together, through these district engagements, we are learning how to re-shape and innovate a broad ecosystem. This is enabling us to help create more favorable conditions for our schools and to better support district-level capacity building and district-wide learning and improvement. We see district-based engagements as increasingly common and believe this will lead to a dramatic increase in the number of students accessing deeper learning.



WORKING TOGETHER TO TRANSFORM SCHOOLS

AS A LEADING DESIGN PARTNER FOR COMPREHENSIVE SCHOOL CHANGE, NEW TECH NETWORK, A NATIONAL NON-PROFIT, WORKS CLOSELY WITH NEARLY 200 DISTRICTS AND SCHOOLS.



126 HIGH SCHOOLS	41 MIDDLE SCHOOLS	23 ELEMENTARY SCHOOLS	4,400 TEACHERS	72,000 STUDENTS	118 DISTRICTS
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WEST DES MOINES: A PATHWAY TO K-12 STUDENT SUCCESS

West Des Moines Community Schools (WDMCS) became the first district in Iowa to partner with New Tech Network (NTN) in 2015. A key reason for engaging NTN was Iowa's Universal Constructs, part of a newly adopted state policy which identified essential competencies and habits of mind needed for students to succeed in college, career, and life. These skills and dispositions align perfectly with the New Tech school model learning outcomes — Knowledge & Thinking, Written Communication, Oral Communication, Collaboration, and Agency. The professional development, content, tools and community provided by NTN were instrumental in supporting the district's mission to prepare all WDMCS' students for success.

WDMCS' unwavering commitment to its students initially led to the launch of four New Tech partner schools in 2015 and the adoption of a district strategy that featured opening New Tech model elementary, middle and high schools. These first four schools included full implementation at two elementary schools — Clive Learning Academy and Crestview School of Inquiry — and grade level team adoption at two junior high schools — Indian Hills and Stilwell — which immediately offered families a K-8 pathway within WD-

MCS and created a cohort of engaged adult learners working toward a common aim.

In addition to the multi-school launch, which enabled cohort learning and support, district leadership smartly invested in the district's capacity to coach and sustain the innovation by creating two positions, a New Tech Professional Learning Development Coach and a Business Liaison. The coach position serves to lead the learning of and provide a voice for those engaged in WDMCS' network of New Tech schools. The Business Liaison's goal is to embed authentic experiences into the curriculum by connecting area business and community partners to student projects through authentic community challenges.

In the fall of 2017, the district partnered with NTN to bring the New Tech school model to 9th graders for the first time in Woods Academy at Valley Southwoods Freshman High School. In 2018-19, WDMCS will partner with New Tech to implement the model in grades 10-12 at Valley High School; this is the final piece of the district's K-12 pathway to student success on Iowa's Universal Constructs.



Teachers at West Des Moines designed a prototype of a satellite deployment system for NASA. Their proposal was one of only 12 student-derived designs in the nation to be selected by NASA for testing. 28% of the schools in the New Tech Network are STEM-themed schools.

COLLETON COUNTY, SOUTH CAROLINA: A TURNING POINT

When Colleton County Schools in South Carolina first considered adopting the New Tech school model in 2011, they were searching for ways to address particular challenges of the high needs, low performing high school students in their economically underdeveloped and largely rural community. With a county history of poor performing schools in a region along the South Carolina I-95 "Corridor of Shame," district leaders knew they were compelled to do something different to better position students for success in college and in the STEM-driven economy of their state.

Supported by a five-year United States Department of Education grant, Colleton County High School and one other nearby high school were selected to implement the New Tech school model as a new initiative to turn around these two low-performing schools. This proved to be a turning point for a generation of graduates.

In 2013, Josh Cable, a founding teacher at Cougar New Tech (CNT), an academy at Colleton County High School, believed CNT could play "a major role in changing the Corridor of Shame into a Corridor of

Innovation." With its first New Tech students graduating in 2017, there is ample evidence that this aspiration has been realized. Cougar New Tech is a National Demonstration Site and annually hosts hundreds of local, state, and national visitors seeking innovative ideas in education.

Going forward, the Colleton County school district is expanding its New Tech efforts. In the fall of 2017, the Health Careers Academy at Colleton County High School and Bells Elementary implemented the New Tech model.

As Cougar New Tech students turned their tassels, the district and state began preparations to accelerate implementation of proven practices that are helping them move from a Corridor of Shame to a Corridor of Innovation.

"After five years, there is clear evidence that the approach works. I am excited to tap into the power of being part of this network," stated Superintendent Franklin Foster. CNT graduates are truly ready for success in college, career, and life; they are the turning point for this generation.



A REASON TO HOPE: PUBLIC SCHOOL INNOVATION

Across the country, we see ample evidence of public district innovation. Through this report we want to highlight the exciting, transformative efforts underway in elementary, middle and high schools. We are inspired by the commitments we see on a daily basis by the teachers, principals, and district staff to engage in their own learning and their willingness to engage with colleagues across the Network to better serve all students.

We view great public education as a critical tenet in our “democracy contract,” compelling schools to cultivate a more awake, aware, engaged citizenry. We also believe learning needs to look and feel different for the students and the adults to shift from “one size fits all” schools to schools that deeply engage students in their local and global world.

The professionals across our network of schools remind us that learning with network peers and engaging in productive struggle together is part of what makes their New Tech Network learning experience compelling and relevant. What lies ahead is more of that school-to-school and peer-to-peer interaction and learning around the common challenges and problems each of our partner schools is working to address in their own communities.

As we look ahead to sharing the results of a year of making learning more personal for each student, we will facilitate and encourage New Tech teachers and school leaders to engage in more networked learning and building more individual connections across schools. Our strategic aim to connect students to a more personalized school experience will help address opportunity gaps too many students face. Improving relevance is one way to further connect students to their communities and to create opportunities for students to engage.

Our hope is that student engagement — not just in the classroom but in the community — serves as a lever that produces students better prepared for college, career and citizenry.



ABOUT NEW TECH NETWORK

New Tech Network (NTN) is a design partner for comprehensive school change. We work closely with nearly 200 districts and schools to create innovative learning environments in 28 states and Australia. We are building a dynamic, perpetually learning network, and while we began our work at the high school level, we now support elementary, middle and high schools. Through a proven school model, a project-based learning (PBL) platform, and powerful professional development, we guide schools toward lasting change and ongoing improvement.

Our shared vision for student success – college and career readiness for all students – has a very specific meaning in the Network. What we mean is that every graduate of a New Tech school leaves aware, eligible and prepared to pursue postsecondary education or training.

The New Tech school model is based on four design pillars:

Culture that Empowers

School-wide culture of empowerment for students and adults

Teaching that Engages

Project and problem-based approach to instruction

Technology that Enables

Use of technology for collaboration, access to information, and self-directed learning

Outcomes that Matter

Student outcomes for college, career, and civic life readiness



RESEARCH FINDINGS

1. New Tech Network students outperformed similar non-NTN students on state EOC exams

Key finding: Compared to similar students, New Tech Network (NTN) 9th graders outperformed comparison students on End of Course (EOC) Math and EOC English Language Arts (ELA) exams and NTN 11th graders outperformed comparison students on ACT composite scores (Stocks, Odell, & Culclasure, 2016; Culclasure, Odell, & Stocks, 2017).

Sample: ANCOVA tests were used to determine the effect of the New Tech Network model on student achievement in 4 NTN schools and 4 comparison schools in the southeastern United States, controlling for 8th grade state exam score, race, and free and reduced lunch (FRL) status

2. New Tech Network students outpaced the national average in high school graduation and college persistence

Key finding: National Student Clearinghouse (NSC) data was used to evaluate college enrollment and college persistence rates for NTN schools. School level data collected from NTN schools was used to evaluate high school graduation rates. On average, participating NTN schools had a higher 2016 high school graduation rate (92% compared to 83%¹), class of 2015 immediate college enrollment across all institution types (70% compared to 69%²), and class of 2014 first-year persistence rates across all institution types (82% compared to 78%³). These findings extend to NTN schools serving high poverty student populations. Analysis of 2014 data demonstrates NTN schools serve students from poverty well. For every 100 NTN students attending a high poverty school, 93 graduated high school and 55 enrolled in college within a year. Nationally, for every 100 students, 75⁴ graduated high school and only 44⁵ enrolled in college (Bergeron, 2017).

Sample: 55 schools to calculate 2016 graduation rates; 45 NTN schools to calculate 2015 enrollment; 35 NTN schools to calculate 2014 persistence; 28 NTN schools serving 40% or more Free and Reduced Lunch (FRL) to calculate 2014 outcomes for high poverty schools.

3. New Tech Network schools and other deeper learning network schools demonstrated higher scores on measures of cognitive, interpersonal, and intrapersonal competencies

Key finding: Compared to matched similar non-deeper-learning schools, students who attended deeper learning network schools scored higher on all three OECD PISA-Based Test for Schools (PBTS) subjects tested (reading, mathematics, and science). They also earned higher scores on the state English Language Arts (ELA) and mathematics tests. Students who attended network schools reported higher levels of interpersonal and intrapersonal competencies, such as collaboration, academic engagement, motivation to learn, and self-efficacy. Network students were more likely to graduate from high school on time (i.e., within four years), enroll in four-year postsecondary institutions, and enroll in selective institutions (Zeiser, Taylor, Rickles, Garet, & Segeritz, 2014)."

Sample: 19 deeper learning network schools. New Tech Network was one of ten school networks that participated in the William and Flora Hewlett Foundation's Deeper Learning Community of Practice.

4. New Tech Network high school students show considerably more growth in critical thinking skills

Key finding: Critical thinking skills were measured using the College and Work Readiness Assessment Plus (CWRA+) administered by Council for Aid to Education (CAE). NTN high school students compared to non-NTN students consistently demonstrated that NTN students experience more growth than non-NTN students with an average growth of 52% more than the CAE sample over the last 3 years (CAE, 2014; CAE, 2015; CAE, 2016). These findings hold when New Tech Network students are compared to matched similar students at non-NTN schools (CAE, 2014).

Sample: 13 New Tech Network schools participated in 2013-14 and 2015-16; 12 New Tech Network schools participated in 2012-13 and 2014-15.

5. New Tech Network school successfully increased opportunities for underrepresented STEM students

Key finding: The New Tech Network school included in the analysis successfully increased opportunities for under-represented STEM students (Spillane,

Lynch, & Ford, 2016). Project-based learning in the NTN school created an instructional environment that positively impacted student learning, relationships, and technology use. The learning community improved student self-efficacy. Not only did students learn 21st century skills, but also they incorporated them into projects. The NTN school had higher attendance rates than the comprehensive high school and the NTN school had a higher percentage of students "meeting standard" on the state test. Nearly all NTN students in the research graduated from high school and were accepted to college (Lynch, Spillane, Peters Burton, Behrend, Ross, House, & Han, 2013).

Sample: One New Tech high school was identified as a successful inclusive STEM school and evaluated as a part of the Opportunity Structures for Preparation and Inspirations research.

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Research footnotes for #2

[1] Public high school 4-year adjusted cohort graduation rate (ACGR), by race/ethnicity and selected demographics for the United States is available by year from the Common Core of Data (CCD) maintained by National Center for Education Statistics (NCES). The most current data available was used for comparisons. https://nces.ed.gov/ccd/tables/ACGR_RE_and_characteristics_2014-15.asp

[2] NCES data from the Digest of Education Statistics. https://nces.ed.gov/programs/digest/d16/tables/dt16_302.10.asp?current=yes

[3] Data from National Student Clearinghouse participating high schools (27% of U.S. high schools) <https://nscresearchcenter.org/snapshotreport-persistence/retention22/>

[4] The most current ACGR data available from the Digest of Education Statistics was used for comparisons. https://nces.ed.gov/programs/digest/d15/tables/dt15_219.46.asp

[5] NCES data from the Digest of Education Statistics. https://nces.ed.gov/programs/digest/d15/tables/dt15_302.30.asp



2017 IMPACT REPORT

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