THE HIERARCHY OF CHANGE

DESIGN YOUR WAY TO SCHOOL CHANGE

New Tech Network (NTN) believes that sustainable, high-impact practices for supporting student development in the learning outcomes are only possible through the alignment of principles and practices across the entire school community, not just in a few isolated classrooms or only by shifting methods of instruction.

This implementation approach is expressed through NTN's Hierarchy of Change.

Like Maslow's Hierarchy of Needs, the top of the pyramid cannot be reached without first addressing the layers underneath. A clear purpose and mission aimed at the achievement for students is the starting point for implementation of the New Tech Network model. This is followed by the development of an empowering culture built upon strong relationships of trust, respect, and responsibility.

From there, campus structures and policies must align with a school's purpose and cultural aims. Finally, instructional practices should be aligned with and supported by the school's purpose, culture, and structures.

STUDENT ACHIEVEMENT

INSTRUCTION AND ASSESSMENT

POLICIES AND STRUCTURES

CULTURE AND RELATIONSHIPS

PURPOSE AND MISSION

THE NEW TECH NETWORK MODEL
DESIGN YOUR WAY TO SCHOOL CHANGE

With the successful implementation of the New Tech Network (NTN) model, every New Tech Network school has the capacity to realize the full potential of each student. As a national non-profit school development organization, we partner with districts and charter schools to implement an innovative school model so that all students graduate college and career ready.

THE FOUR PILLARS

New Tech Network schools focus on four elements to prepare students for the future.

OUTCOMES THAT MATTER

Every NTN partner school adopts the five New Tech Network Learning Outcomes. The outcomes are: **Agency, Collaboration, Knowledge and Thinking, Oral Communication, and Written Communication.**

TEACHING THAT ENGAGES

Project-based learning (PBL) is the primary pedagogy all NTN teachers embrace in their classrooms. PBL requires contextual, creative, and shared learning. Students collaborate on meaningful projects in order to answer challenging questions. **By making learning relevant, students see a purpose for mastering state-required skills and concepts.**

CULTURE THAT EMPOWERS

Each NTN partner school promotes a culture of trust, respect, and responsibility, encompassing student and professional culture. Students and teachers alike have ownership over the learning experience and their school environment.

TECHNOLOGY THAT ENABLES

Echo supports project-based learning and features an innovative gradebook that aligns to the deeper learning skills students are developing. Digital tools, cultivated and aligned content, and a community of shared learning are integrated to create a powerful platform to support student and adult learning.

THE LEARNING OUTCOMES

Through collaboration with teachers, university academics, and business people, and informed by current research, New Tech schools have clearly defined outcomes for their students that are aimed at fully preparing them for college and career success:

KNOWLEDGE AND THINKING   **ORAL COMMUNICATION**   **COLLABORATION**   **AGENCY**   **WRITTEN COMMUNICATION**

OUTCOMES THAT MATTER

THE NEW TECH LEARNING OUTCOMES

Through collaboration with teachers, university academics, and business people, and informed by current research, New Tech Netwrok (NTN) schools have clearly defined outcomes for their students that are aimed at fully preparing them for college and career success.

Knowledge and Thinking: Developed using the college readiness assessment research of Stanford University's S.C.A.L.E. division, this outcome expresses the key knowledge and thinking skills needed to move all students toward college readiness in each core discipline.

Collaboration: Students need to know how to work well with others, whether it's in partnership, as a small team, or in a large group setting.

Written Communication: Substantial evidence suggests that writing is not only a key skill that students need in nearly any career or college pathway, but that the act of writing can also help students develop important and transferable thinking skills such as analysis, inference, logic, and rhetoric.

Oral Communication: Students not only need to be able to communicate and defend their ideas orally, but also develop confidence as public speakers.

Agency: To have agency is to have ownership over one's own learning, using a growth mindset to improve in any area through effort, feedback, and practice. Based heavily on the research of Carol Dweck and Camille Farrington, the agency outcome reflects the skills needed to effectively navigate the world as a lifelong learner.

TEACHING THAT ENGAGES

KEY PRACTICES

New Tech Network (NTN) schools use project-based (PBL) and problem-based (PrBL) learning methods to help students develop the targeted outcomes through problem solving experiences that are complex and meaningful to students. Projects typically center around authentic, complex tasks that are provided before instruction, to create a need to learn the standards. Students often work together to solve problems and accomplish tasks, learning content and practicing the skills embodied in the New Tech Learning Outcomes. Authentic performance assessments are used to evaluate both collaborative and individual achievement.

CO-TAUGHT, INTEGRATED CURRICULUM NTN teachers often work with their colleagues to develop integrated curriculum that blends two or more subjects together into one course (e.g. ELA 10 and World History combine into World Studies). These integrated subjects are taught collaboratively, with two or more teachers facilitating together in the same classroom. The positive benefits include: the active modeling of collaboration, greater differentiation options for students, and ongoing observational and thought-partner feedback for staff.

STRUCTURED SCAFFOLDING Much of the supporting instruction within a project is based on the premise that students should receive direct support when they need it. Students are provided tools to help them identify their learning needs, and can request additional support to help address those needs – often through direct instruction.

EMBEDDED ASSESSMENT OF ALL OUTCOMES The instructional model for NTN schools is designed to help students develop the knowledge and skills represented in all the New Tech Learning Outcomes. To fully support that development, intentional scaffolding and assessment of each outcome is embedded throughout the curriculum.

COMMUNITY CONNECTIONS NTN teachers build connections to experts and organizations in their community. That brings greater meaning and authenticity to their project-based learning (PBL) or Problem-based learning (PrBL) curriculum. Not only does student engagement increase, but having an external evaluator of student work also helps place the teacher into the role of guide or coach, allowing students to see them as partners.

CAPSTONES Students at NTN high schools personalize their education through capstones, early college experiences, and professional field work. As students progress, key benchmarks or capstones often mark the way, allowing them to celebrate their growth and gather feedback about potential next steps in their academic and professional careers. These capstones or benchmarks often exist in the form of portfolio presentations or defenses, student-led academic conferences, and senior projects.

SUPPLEMENTAL EXPERIENCES To develop student readiness for college, NTN schools support students in gaining early college experience before graduation. Students can complete college coursework on university campuses for free or at a reduced cost, or the NTN school may work to offer college-level classes on their own campus. A school might create structures that allow students to take online college courses, to coordinate college tours throughout the year, and to bring in guest speakers who can help students understand the college experience. NTN schools seek connections for students to various forms of professional fieldwork. Often, this takes the form of internships or volunteer efforts. When those options are limited by community context, a school may choose to leverage technological tools that allow students to do things like interview professionals from different fields of interest or to engage in deeper research about various aspects of the job.

TECHNOLOGY THAT ENABLES
LEARNING COLLABORATIVELY AND VIRTUALLY

1:1 ENVIRONMENT

Using a technology-rich environment that includes a 1:1 student-to-computer ratio, all members of the school community are able to create, communicate, access information, and engage in flexible self-directed learning.

ECHO

Echo® houses all digital life for New Tech Network (NTN) partner schools. The learning management platform hosts resources for student projects and assessment, robust teacher communities, professional development, parent involvement, NTN-provided resources, and more. Echo's vast array of capabilities manifest in a user-friendly interface that parents, students, and teachers navigate daily – easily finding tools and resources customized for their needs. Echo is unique because it is the only learning management platform designed to assist and assess students based on multiple learning outcomes. Engaging teaching and robust feedback systems need a sophisticated but accessible platform to be effective.

Content: NTN uses Echo to house course resources, projects and project plans, assignments, and more. Educators benefit from an extensive Resource Library where they can create their own class projects and share them back to the NTN community.

Tools: The Echo learning management platform was specifically designed to address the unique needs of project-based learners, facilitators, and parents. The multi-dimensional gradebook, exclusively provided to NTN partner schools, is the only gradebook of its kind organized around the assessment and reporting of multiple learning outcomes.

Community: The Echo community is vibrant and growing. Comprised of all of the staff at NTN partner schools, teachers and school leaders exchange best practices, collaborate efficiently, share projects, and develop cross-school projects with ease.

NTN HELP CENTER

The NTN Help Center: The NTN Help Center was created to support school leaders and teachers that have partnered with NTN to transform teaching and learning in their schools. There are three tiers of support provided through the NTN Help Center:

Free Limited Access: Most of the articles included in the quick guides are open and available to the public. No sign in is required.

Full Access: Schools who have selected to access NTN's content and community in their contract have access to hundreds of additional articles that are not included in the quick guides.

Full Access and Support: Schools who desire additional coaching support can choose this option which allows teachers and school leaders to submit request for coaching support through the Help Center. Starting in the fall of 2020, all coaching support will occur through the Help Center.

CULTURE THAT EMPOWERS
TRUST. RESPECT. RESPONSIBILITY.

By creating a culture of trust, respect, and responsibility, New Tech Network (NTN) schools empower students and staff to develop positive, meaningful relationships. Those relationships often allow for student voice to be heard differently than at other schools. **Student survey data is used to inform school policies and practices - allowing students to have the opportunity to demonstrate trust, respect, and responsibility in their day-to-day activities.** Students in NTN schools grow and develop because they are given the opportunities and the freedom to do so. For example, in the first school that used the NTN model, there were no bells between classes, there weren't bathroom passes, nor were there hall passes. While not every high school today releases students from some of those restrictions, there are always considerations to decide if they are necessary at the school.

Often, school culture is facilitated by maximizing interaction across the campus community. Collaborative student groups, team teaching, fully inclusive classrooms, faculty work-groups, and student-driven clubs are common practices used to build relationships across all groups. To further maximize collaboration, advisory classes are common place at NTN schools. In addition to providing a place where students have the opportunity meet with teachers and peers outside of an academic course, this structure also provides more direct care for school culture development and individual socio-emotional support. Along with other existing structures on campus, **advisory classes help address student needs around college and career awareness, general academic counseling, and preparation for key benchmarks** (project exhibitions, senior project, graduation, etc.).

A vibrant school culture applies to the adults as well as the students. New Tech Network schools are intentional in how they foster the culture of their staff. NTN believes that adult culture sets the ceiling for student culture. It is extremely rare to see a student culture that is more robust than the adult culture in the building. This means that staff must also participate in a culture of trust, respect, and responsibility as well. The regular use of norms, shared decision making practices, and developing ownership over schoolwide policies are key habits that New Tech school staff put into place to help ensure that their culture is strong.

LEADERSHIP AND ADULT LEARNING
DESIGN YOUR WAY TO SCHOOL CHANGE

Principals, district staff, and administrators who are charged with supporting a New Tech Network (NTN) school employ leadership practices that fully engage all staff in learning through the entire process of implementation and improvement.

The first step toward this form of leadership is understanding that leadership is expressed through a set of practices, and not held within a specific role. Being a principal does not automatically make someone a leader. Alternatively, first-year teachers who learn effective leadership practices greatly help schools improve.

NTN's leadership training and resources are grounded in the practices of Adaptive Leadership, as developed by Ron Heifetz of Harvard University's Center for Public Leadership.

These practices are aimed at helping an organization develop the leadership capacity necessary to navigate the adaptive challenges that don't have readily available answers and that often accompany great organizational change.

Leadership at an NTN school is also focused on the ongoing support of adult learning practices. As implementation of the New Tech Network model evolves at a school to best suit the needs of students and staff, so goes the evolution of the adult learning on campus. As part of the initial adoption of New Tech practices, staff engage in collaborative critique of PBL or PrBL curriculum across all courses.

Over time, this practice evolves into the animation of a cycle of inquiry (see image), using protocols for learning from student work and other sources of student-centered data. A fully evolved New Tech school operates as a learning organization, constantly engaged in repeating cycles of learning for ongoing improvement.

To function as a learning organization, a school must have the culture to support the hard work of improvement; the structures that create the time, space, and tools for the work to happen; and the leadership capacity to keep the learning moving forward through the adaptive challenges that arise. NTN believes that the practices of a learning organization are critical for ensuring ongoing improvement and sustainability of quality student learning within the New Tech Network model.
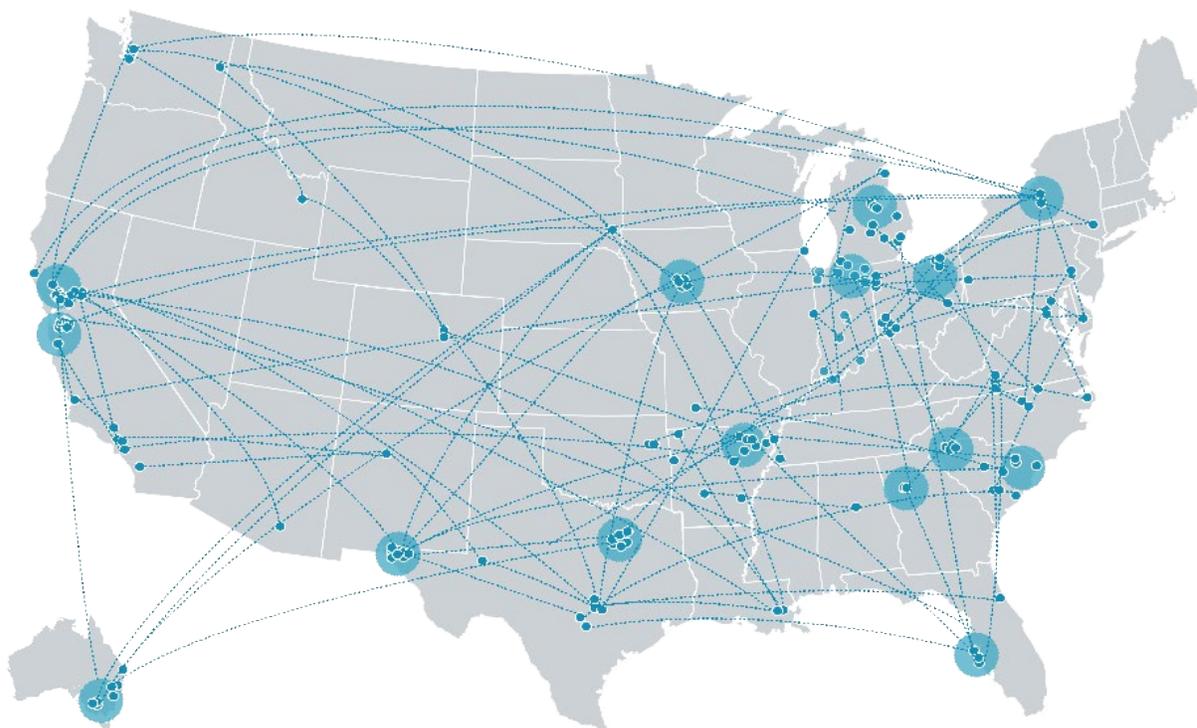
ABOUT NEW TECH NETWORK

NTN SCHOOLS

BY THE NUMBERS

85,000
STUDENTS

5,000
TEACHERS

25,000
GRADUATES OVER THE PAST SIX YEARS

120
HIGH SCHOOLS

50
MIDDLE SCHOOLS

44
ELEMENTARY SCHOOLS

116
DISTRICTS

43
DISTRICTS WITH MULTIPLE SCHOOLS

THE NTN STORY

New Tech Network's (NTN) roots lay in business and community concerns that high school graduates were inadequately prepared to be the self-directed problem-solvers and collaborators that the contemporary workplace demands. What started as one district-operated high school is now a vibrant network of more than 200 elementary, middle, and high schools in diverse communities across the country and in Australia. New Tech Network is a 501(c)(3) non-profit organization based in Napa, California.