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international prize in education

2018 Brock International
Prize in Education Nominee

Diane Tavenner

Nominated by Deborah Gist

2017 Brock International Prize in Education Nominee

Diane Tavenner

Co-Founder and CEO of
Summit Public Schools

Nominated by Deborah Gist

Summit Public Schools

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Diane Tavenner - Biography

Diane Tavenner is the Co-Founder and CEO of Summit Public Schools, a leading public school system that operates 11 schools in California and Washington, as well as a free program that enables schools across the U.S. to implement Summit Learning, its nationally recognized personalized approach to teaching and learning.

Diane founded Summit's flagship school, Summit Preparatory Charter High School in 2003, with the mission to prepare a diverse student population for success in college, career and life, and to be thoughtful, contributing members of society. Summit quickly earned the reputation for being one of the nation's best public high schools, and overwhelming community demand lead to the opening of 10 additional Summit schools, as well as the creation of the Summit Learning Program.

This year, the Summit Learning community will include approximately 330 schools, 2,450 teachers and 54,230 students across 40 states.

Summit has earned many accolades and distinctions, most notably America's Best High Schools from *US News and World Report*, America's Most Challenging High Schools by the Washington Post, and one of the world's Top 10 Most Innovative Companies in Education from Fast Company. To date, 99 percent of Summit graduates have been accepted into four-year colleges, and its graduates complete college at double the national average.

Summit is also recognized for its commitment to continuous improvement and collaboration, establishing pioneering partnerships across industries, including renowned learning scientists and researchers, universities, technology companies, teacher preparation programs, foundations and community organizations.

Diane serves as the Board Chair of California Charter Schools Association representing the vast majority of California's charter schools. Diane also serves on the board of Transcend, The Primary School, and the Carnegie Foundation for the Advancement of Teaching and Learning. She is a member, and moderator, of the Pahara-Aspen Education Fellowship, a fellow in the Broad Academy, and a member of the Young Presidents Organization.

Diane is frequently invited to speak at the nation's top entrepreneurship and education conferences. Most recently she spoke at ASU+GSV, was a keynote speaker with Bill Gates at SXSWedu, and was the feature closing speaker at the Foundation for Excellence in Education.

Prior to founding Summit, Diane spent ten years as a public school teacher, administrator, and leader in traditional urban and suburban public schools throughout California. Diane holds a bachelor's degree in Psychology and Sociology from the University of Southern California, and has a master's degree in Administration and Policy Analysis from Stanford University.

Letters of Recommendation

HARVARD
GRADUATE SCHOOL OF EDUCATION

August 24, 2017

Dear Jury Members:

I am delighted to write a letter of support for the nomination of Diane Tavenner as the 2018 laureate of the Brock International Prize in Education. I believe there are at least three reason Diane is deserving of the award – innovation, collaboration, and fairness.

The first is the most obvious: What Diane has done around innovation in education is simply remarkable. In my mind, not only is she the leading thinker in the country on re-imaging the purpose of education, she has also created what is the gold-standard for personalized learning. Either one, alone, would be sufficient to warrant consideration for the prize; together, they set her apart as uniquely deserving of recognition.

The second reason is Diane's commitment to collaboration, not only with educators, but with the scientific community. As a scientist, working with Diane has been a refreshing example of what a bridge between research and practice *should* look like. Diane is open to insights from science, and works to align practices when warranted; at the same time, she (rightly) believes insights from practice should influence research and theory, and has the knowledge to effectively make this bridge. Collaborating with Diane has had a real impact on my own work as a scientist in ways that I did not expect, and has given me great hope for the kind of research-practice collaborations that are possible.

The final reason is Diane's dedication to fairness. Given the challenges that she faces in scaling Summit Learning, it would be tempting –perhaps strategically advantageous – to cherry-pick kids who get the model to stack the deck for outsized results, thus ensuring survival and success. But if you know Diane, you know this was never an option. Diane cares deeply that her solutions reflect the diversity of students in our country, and that the positive impact of Summit not be restricted to a privileged few. This commitment makes Diane's job harder, but it also is what gives her the chance to truly transform our education system in ways that change the lives of every student.

Diane is a remarkable and innovative leader in education, and her insights will have a ripple effect on the fabric of our education system, transforming how we see children, how we prepare them for the future, and how we equip them to live a meaningful life. For these reasons I recommend her for the Brock Prize, without reservation.

Best,

Todd Rose
Director, Mind, Brain, and Education
Harvard Graduate School of Education

Letters of Recommendation

August 17, 2017

To Whom It May Concern:

I can think of no other leader in our time who more deserves the Brock Prize than Diane Tavenner. There are a number of reasons why Diane would be a stellar pick, and why I believe her leadership on behalf of true and deep education innovation for the public good is a once in a generation kind of leadership. I believe Diane is on par with the likes of Howard Gardner, Ted Sizer, or John Dewey with respect to the power of her ideas and her leadership for transformative innovation in education. The ripple effects of her work will be quite broad and deep.

Over the last 30 years, I have had the privilege of working with many impressive innovators in education, as well as innovators in the private sector. Even given that vantage point, Diane stands out as extraordinary.

Specifically, I see 5 layers of Diane's exceptional innovation leadership and impact - each is worthy in its own right of your attention - but when put together, they make an extraordinarily rare combination of integrative and innovative vision and leadership capability.

1. Breakthrough ideas
Diane's vision is based on a set of truly transformative insights about the process of organizing public education. Her lived experience combined with her insight and vision capacity led her to an entirely new approach to organizing public schools. Her model at Summit is innovative in its combination of putting students at the center of the model, personalizing the process of learning progressions to each student's needs, integrating with great *clarity and specificity* a set of life skills and mindsets and habits at the core of student success, and breaking from the tenacious but often counterproductive habit we have all fallen into in the US of organizing students in age-based cohorts instead of mastery-based cohorts. This combination of shifts is being called "personalized learning" and it is personalized. But it is actually so much *more* than just personalized content.

Letters of Recommendation

There are a series of related follow-on innovations that Diane is also pushing forward with her team, including reorganizing the role of teachers and other adults in the school, and developing mastery-based progressions and other curricular and pedagogical tools. But core to her innovation is her vision for a different way to define success - which includes life skills and habits and the ability to self-organize and problem solve - and then organizing schools in such a way that they provide an *opportunity for each individual student to actually drive his or her own learning progression, and to practice those skills and mindsets and habits as part of their schooling experience*.

2. Integrative vision and leadership
Diane is able to lead across silos. Her vision requires her to build bridges between traditional educators, social scientists, psychologists (developmental and organizational) and policy leaders. Further, she has also created a bridge to connect progressive educators, technology innovators, and traditional content-emphasizing educators. And in so doing she has created a model that might provide a path forward in uniting a previously very fragmented and divided field.

Diane's work resonates for progressives who value her process design including student agency and project-based learning and her focus on emotional development or the "whole child." But progressives have not always been known for tracking concrete or measurable academic progress, so Diane's underlying technology platform where students can track (and drive) their own mastery of content as well as skills and mindsets, helps combine progressive approaches with more traditional content mastery goals. By combining progressive tactics and emphasis on whole child development, with traditional academic rigor, and truly innovative technology tools and organizational design, Diane has created the potential for a new unifying framework that may be able to rally support from across a wide spectra of pedagogical, political, and disciplinary perspectives.

3. Modeling
Not everyone cares about this, but I believe leaders who can actually manifest the bold ambitions they ask of others are likely to be more successful over the long haul at *inspiring*, *creating, and sustaining* change. They model what they hope to see others embrace, rather than just talking about it abstractly. Diane is able to manifest the complex combination of skills, mindsets, habits and content mastery that she is asking adults and young people to pursue. Further, she has that rarest of abilities to humanize the innovation or change process by being willing to share her personal challenges as a learner and to demonstrate great empathy and vulnerability, all the while pushing people to re-envision what's possible. She IS the change she wants to see in the world, as Gandhi asked us all to be.

Letters of Recommendation

4. Translating ideas into action
Unlike many innovative thinkers who envision an entirely new way of doing things, but cannot create proof points in the real world, Diane has actually created Summit - the organization and the schools - to SHOW what's possible.

5. Scale
Rarer still is the innovator who can both provide a concrete proof point and simultaneously pursue wide-spread scale or network effects with innovation adoption beyond their own locust of control. Diane's work to create Basecamp and to expand the application of her ideas to a huge network of schools and systems of schools is quite remarkable.

Diane is one of the most capable leaders I have ever met. And I have spent 30+ years focusing on innovation in education and the nexus between that world and the technology innovation world, so I have a good sense of comparisons to judge Diane's capabilities. Most of our progress has come through improving efficiency on a very old model, rather than truly innovating on the model. Most of the innovation we have seen over the past few decades in education have been either relatively small process innovations (with the exception perhaps of charter schooling which was an innovation in governance) or specific point-solution innovations that while potentially helpful, were not even close to the breadth and depth of integrative innovation Diane is leading.

Sincerely,

Kim Smith
Founder and CEO
Pahara Institute

Letters of Recommendation

CHAN ZUCKERBERG INITIATIVE

To Whom It May Concern,

In a world where education remains one of the surest paths to opportunity and inequitable access to great education remains one of the greatest drivers of inequity, there are too few leaders who have the belief in the potential of all children; are grounded in practice and experience; and have the capacity to not only envision a new way but create it. Diane Tavenner is one of those rare leaders.

Diane opened the first Summit Public School 15 years ago on the belief that education in this country can and should be better. Her grit, passion and unrelenting commitment to children -- not just in her 11 schools, but everywhere -- has opened entirely new possibilities for teachers and students.

Today, thousands of teachers and students around the country are changing the way they teach and learn utilizing the Summit Learning model developed, pioneered and supported by Summit Public Schools. The Summit Learning Platform empowers teachers to tailor instruction to the unique needs of students and students to take ownership of their learning, putting the individual needs and interests of each student at the center of their education so they can reach their full potential. This simple but profound reorientation is no less than revolutionary and worthy of note.

As a result, I am proud to work with Diane and to nominate her for this award.

Best,

Jim Shelton
President for Education
Chan Zuckerberg Initiative

“Redesigning Education”

Keynote at the Foundation for Excellence in Education 2016 National Summit on Education Reform

“I have three measures that I hold myself accountable to every single day: ‘Is this school I wish I could have gone to? Is this a school I wish I could have taught in?’ And, ‘Is this a school I would send my own child to?’ There isn’t a day that I don’t ask myself those questions. And if I can’t answer yes, I won’t keep doing the work I’m doing. The good news is I keep answering yes.”

Watch the full keynote
(https://youtu.be/t_K0cBc2QYQ)

EXCERPT FROM
The Science of Summit

The Science of Summit is a groundbreaking white paper 15 years in the making. *The Science of Summit* is our effort to share what we believe about young people, about the promise of public education, and about principles for school design rooted in the science of learning. Read the full report at summitlearning.org/research.

Preface

IN PURSUIT OF TRUE EQUITY AND OPPORTUNITY

The majority of schools in America do not create the conditions to nurture the talents of every child, especially those whom systemic racial and socioeconomic inequities have failed. While this may not be the intent of those operating the schools today, it is the reality cast in the long shadow of history. That leaves us but one question: What do we do about it?

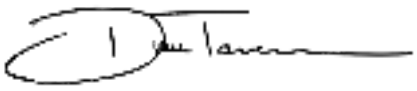
Fifteen years ago, we founded Summit Public Schools to be a place where all means all — a place intentionally designed to serve and embrace every individual child in a richly diverse community. We did so with an awareness of the forces pulling against our mission: poverty, racism, sexism, and discrimination against those with disabilities.

Today, those forces seem only to have grown in strength and magnitude. At Summit, the vast majority of our graduates have the opportunity of college, but that is not good enough — a fact that is simultaneously true and painful.

We know but one way to improve, and that is through brutal honesty and transparency to invite feedback and collaboration.

And so, we are deeply curious and eager to know what you think. What are we getting right? What are we missing? What don't we know? Who can we learn from? How can we get better?

I invite you to comment, but more importantly, I invite you to engage. We seek authentic collaboration with all those who are committed to valuing each and every child, seeing them as individual human beings worthy of all the love, compassion and dignity we give our own children.



Diane Tavenner
Chief Executive Officer, Summit Public Schools

EXCERPT FROM
The Science of Summit

The Aligned School Model Framework

Educational institutions deliver the outcomes they are designed to produce.

Educational institutions deliver the outcomes they are designed to produce. The beliefs that decision-makers hold about human potential directly impact how an education system is set up and, consequently, the outcomes that all children are able to attain. Additionally, the values of a given society, coupled with economic realities, will dictate a specific purpose of education.

Educators can translate such a purpose of education into a clear set of desired student outcomes, evidence-based principles, and educator design choices. Student assessment and program evaluation data measure individual progress and provide important feedback to educators. Such a framework exists on both the micro and macro levels, for an individual school as well as for an entire system of education.

Our current American public education system is based on a specific set of values, beliefs, economic needs, and cultural forces of the 20th century Progressive Era school reformers. The reformers carefully designed a system that would produce a skilled workforce for industrial America, preparing the majority of students for factory jobs and a minority to become managers and elites. Underlying the industrial model was a very specific belief system about the capacities of different groups of students to succeed.

We are living in a post-industrial age, but our public education system still reflects the careful design of an earlier era.

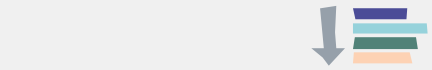
Summit Public Schools, a leading public school system in California and Washington State, and its personalized approach to teaching and learning, Summit Learning, represent an alternative to the industrial model of education. The designs we describe here are based on recent advances in the science of learning: new research that helps us better understand how children develop, how they become learners, and how their environments can nourish or hinder their progress.

We are but one voice in the current innovation landscape in American education. In the pages that follow, we outline our design, both at a school and a system level. After an introduction to our approach, this paper focuses primarily on the research underlying it. Future publications will describe other elements of our framework in more detail.

EXCERPT FROM
The Science of Summit

SIX STEPS FOR DESIGNING AN ALIGNED SCHOOL MODEL

The *Aligned School Model Framework* is used to articulate a school model that consistently and reliably predicts success for all students when implemented effectively — one that is aligned with the school's articulated purpose of education and grounded in evidence.



1 Articulate values and realities

What are the key societal values and economic realities that impact learners? What assumptions and beliefs does your community hold about people as learners?

2 Define the purpose of education

Given your values, beliefs, and realities, what role does education play in your community and our society? What is the purpose of education?

3 Determine measurable outcomes

Based upon the purpose of education, what do you expect all students to know and be able to do upon graduation as a result of their education? What are the measurable outcomes for each individual student?

4 Derive evidence-based principles

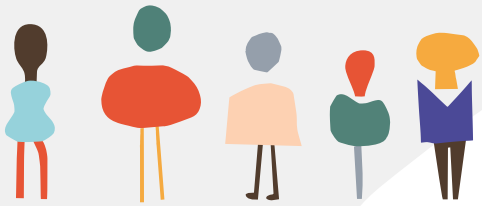
What essential principles are grounded in the science of learning and human development and aligned with the outcomes you expect for all learners?

5 Detail key design choices

Adherent to the evidence-based principles, what specific design choices define a school model that is customized for the community it represents?

6 Assess alignment and coherence of design

Is the school model aligned from steps one through five, and does it present a coherent hypothesis for how to consistently and reliably enable the expected student outcomes for all students?



Press Sample

The Schools of the Future

California's Summit Public Schools offer a personalized model of education that works.

By David Osborne

U.S. News & World Report, Jan. 19, 2016

The first time I visited a Summit Public School, in February 2014, I pulled up in front of a one-story building in an office park. I was sure I had the wrong address – but no, there was a sign. This was Summit Denali, in Sunnyvale, California.

Inside, my surprise deepened. All the students, then sixth graders, were in one big, open area. Most were working on their own, at laptops. A few were working with another student, or in hushed conversations with teachers. All their chairs, desks, tables and whiteboards were on wheels, so the space could be instantly reconfigured.

Diane Tavenner, Summit's co-founder and CEO, explained that she and her colleagues had spent two years piloting profound changes in their education process, and this year they had rolled out the new, personalized model in all seven of their Bay Area charter schools. "The industrial model is really driven by adults," she says. "Kids come in, they're told where to go, where to sit, what they're going to learn, when they're going to learn it. You're on the assembly line. We believe the next generation models are about the students being empowered to drive their own learning."

"Look at the economy: it's not about concrete knowledge, it's about higher order thinking skills, and the ability to perpetually learn and grow," she adds.

Summit focuses on four big things, she told me: cognitive skills, content knowledge, real-life experiences, and the "habits of success." Cognitive skills, such as problem-solving, effective communicating, creative thinking, writing and speaking, are taught in "project time," through investigations, laboratory experiments, seminars, papers and oral presentations. "Technology doesn't do this well," Tavenner says. "This is what high quality teaching does well, so this is where the teachers spend a lot of their time."

But to carry out projects, students need a certain amount of knowledge. So they spend 16 hours a week – half at school, half at home or after school – in "personalized learning time." This is what I had witnessed at Denali: students using online resources Summit's teachers had put together.

Students worked at their own pace, and when they felt they had mastered a concept, they took a 10-question assessment. If they could answer eight of the questions correctly, they checked that off and moved on to the next topic.

To succeed in college and life, students would also need the "habits of success," Tavenner says – non-cognitive skills such as the ability to set a goal and meet it, to persevere, and to work with others. Summit teachers help them develop these qualities at all times, but particularly in "mentor time" and "community time." During the latter, up to 18 students gather with their mentor teacher for activities, discussions, celebrations and the like. These mentor groups are deliberately put together to maximize their diversity, and they stay together for the duration of middle or high school.

Teachers devote at least 200 hours a year to mentoring and coaching, while also serving as college counselors and family liaisons.

Finally, Tavenner says, "What sets kids up for success in college and life are a series of experiences" that change their perspectives. Affluent parents make sure their children get such life-altering experiences, whether it's at camp, through travel or through volunteer work. Poor parents have a tougher time doing

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that. So at Summit, kids spend eight weeks a year, in two-week chunks, doing "expeditions": visual and performing arts classes, internships, video productions, computer science or web design classes, volunteer work, even trips overseas. Our goal is for kids to have "at least one perspective-altering experience" during their time here, Tavenner says

I walked out that day feeling like I had glimpsed the future.

Tavenner founded Summit Prep Charter High School in 2003, in Redwood City, a working class city halfway between San Jose and San Francisco. Summit opened a second high school in 2009, also in Redwood City, and in 2011 followed with two high schools on the East Side of San Jose, a low-income area. Today it has seven schools in the Bay Area and two in Washington State, serving roughly 2,500 students in grades six through twelve.

Summit schools are deliberately heterogeneous: mixed by race and income and reflective of the demographics of their districts. Almost half the students are Hispanic, 20 percent are white, 11 percent are Asian, 6 percent are African-American, 7 percent are multiracial, 12 percent are English language learners, and 42 percent are low income (qualifying for a free or reduced-price lunch).

From the beginning, Summit outperformed its surrounding districts, on a budget of only $7,000 per child. Over its first decade, 96 percent of its graduates were accepted to four-year colleges.
When their first class was four years out of high school, Tavenner and her colleagues began to contact as many alumni as they could, to see who had finished college. Over the next two years, they discovered that only about 55 percent were on track to graduate within six years. This was higher than the national graduation rate of about 42 percent – and much higher than the rate for Hispanics – but it felt like failure. "When I got that number, I felt like someone had punched me in the stomach," Tavenner says.

So they began interviewing every one of their graduates. They learned two big things. First, a third of their graduates had to take remedial classes in college, mostly in math – virtually a "death sentence" for their college hopes, based on national statistics. The Summit model had always been heavy on deeper learning, not rote fluency or filling knowledge gaps, Tavenner says, so they realized they had to tweak it.

In 2011-12, they piloted an intensive "blended learning" math program in ninth grade, in partnership with Khan Academy, at their two high schools in San Jose, and it worked. Students were more engaged; two-thirds achieved higher growth on NWEA MAP tests than the national norm; and the lowest performing students showed the fastest growth.

The second thing Summit learned was that by providing so much support for their students in high school, they had unwittingly left them without the self-reliance they would need in college. When students encountered hurdles, many lacked the skills or support network to overcome them, so they dropped out.

That insight, combined with the success of the blended learning pilot, brought an "aha" moment. Summit would have to reinvent its schools, so students would become "self-directed learners," ready to take responsibility for their own learning and persist through obstacles. "Literally everything had to change," Tavenner realized.

In May 2013 Summit hired its first full-time software engineer, and later that year Facebook founder Mark Zuckerberg visited. This led to a "secondment agreement," by which the company provided six engineers for free. They helped Summit develop a full-fledged, scalable Personalized Learning Platform, for all subjects.

Summit's teachers created a Common-Core aligned guide for each subject, with diagnostic assessments students take to see what they already know and what they still need to learn. For each topic, they put together an overview and a series of focus areas, with playlists students can choose from to learn the content – guided practice problems, presentations, videos and more. They created a pool of multiple-choice questions for the 10-question assessments students take to demonstrate they have mastered the content. By last June, Summit had more than 700 playlists, with associated assessments.

Each student has a Google Chromebook and a dashboard that shows where they are on each subject: topics they have mastered turn green, those they still need to master are red. They work on what they choose, at their own pace, using the playlist options that fit their learning style best. But their mentor teacher can always see where they are and nudge them if they're falling too far behind.

Summit added one more piece of personalized learning, because 60 percent of its students entered Summit behind grade level in reading. For 30 minutes a day, every student reads, using a program tailored to their skill level, or small group reading instruction for those more than three years behind. That proved so successful that last year Summit added 30 minutes a day of math practice.

But content knowledge is only 30 percent of a student's grade. The other 70 percent comes from some 200 different projects, designed to enhance students' cognitive skills. Ninth grade students use mathematical models to predict growth in the stock market; seventh graders design products to prevent heat exhaustion in athletes.

The Schools of the Future

California's Summit Public Schools offer a personalized model of education that works.

By David Osborne

U.S. News & World Report, Jan. 19, 2016

Last spring was the first time that California gave the Smarter Balanced standardized tests, aligned with the Common Core. While only one in three California students met or exceeded math standards, 43 percent of Summit students did. And while 44 percent met or exceeded English language arts and literacy standards in the state, 63 percent of Summit students did. Some 27 percent of California students pass at least one Advanced Placement exam, but 57 percent of Summit students do.

By 2015, 93 percent of Summit's entering freshmen graduated, about 10 percentage points higher than comparable school districts. Last spring 99 percent of Summit graduates were admitted to four-year colleges, and in San Jose, where seniors had experienced the personalized model for all four years, 100 percent were admitted to four-year colleges.

Because part of its mission is "to have a broader impact on public education in America," Summit makes all of its work, including the Personalized Learning Plan, available for free to all comers. Through its "Basecamp," 19 schools, two thirds of them traditional public schools, are adopting Summit's methods, and a second cohort will start this summer.

David Osborne is director of the project on Reinventing America's Schools at the Progressive Policy Institute. He is the author of the forthcoming book "Reinventing America's Schools: Creating a 21st Century Education System."

Press Sample

Pacesetter in Personalized Learning

Summit charter network shares its model nationwide

By Joanne Jacobs

Education Next, Fall 2017

How does a thermometer work? A group of 7th graders discuss their ideas.

Nearby, a student named Ferdinand is modifying a swallow so the bird can survive in the video-game fantasy world he's designed on the computer. "I'm giving it spiked feathers," he says with a grin. "My world has insane predators."

Some students are working in pairs. Others are on their Chromebooks. The classroom is abuzz with activity.

"They know what to do," says Brandy Holton, who teaches 7th-grade science, social studies, and English at the Chicago International Charter School (CICS) Irving Park, which serves grades K–8. "That never would have happened before."

What accounts for the change? The charter's middle school is one of 130 schools nationwide piloting the Summit Learning Program (SLP), developed—and offered entirely free—by Summit Public Schools, a high-performing charter network based in California. Summit's eight schools, two of them in Washington State, are known for an approach that emphasizes both project-based and self-paced learning as well as the development of cognitive skills. In 2015, the network started sharing its model with schools throughout the country in an effort to improve their methods and spread their ideas.

The tech mainstay of Summit's model is an online platform that the network developed with engineering help from Facebook. It comes loaded with a comprehensive, teacher-created curriculum, ideas for student projects, and assessments for grades 5 through 12 in core academic subjects.

Students master academic content through personalized learning, choosing from "playlists" made of such learning tools as Khan Academy videos, BrainPOP animations, guided practice problems, interactive exercises, websites, and texts. They take tests when they feel ready, moving on to new content when they've achieved mastery. A blue line on the student's dashboard shows whether he or she is progressing at the expected pace.

Technology is only part of Summit's model. Students spend most of their time learning cognitive skills and concepts through individual and collaborative "deeper learning" projects. Ninth graders create scientific experiments to measure the impact of technology waste on the environment; 7th graders explore the Civil Rights movement by examining injustices in their own communities.

Teachers work one-on-one with students, helping them set short-term and long-term goals and develop "habits of success," such as self-management, responsible decision making, and persistence.

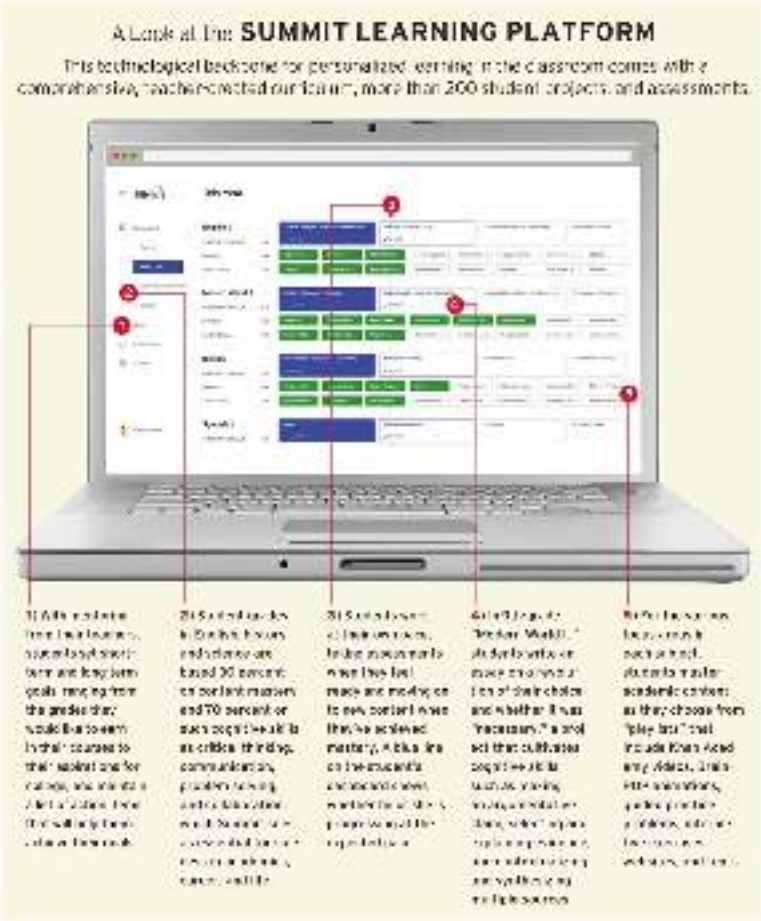
Compared to her students of past years, this year's pupils are much more mature and self-directed by midyear, says Holton, a fourth-year teacher. They no longer act as if "the only way to learn is through the teacher."

Holton has changed, too. "I step back and let the students do the heavy lifting," she says.

Preparing for Change

In the summer of 2016, CICS Irving Park sent its middle-school teachers to Summit's Everest Public High School in Redwood City, California, for a week of intensive training. This, too, is offered free of charge, as is mentoring for teachers and school leaders and technical support throughout the school year.

In exchange for the free services, partner schools are testing how the platform works in a variety of settings, adapting it to their needs, and sharing their improvements. About 70 percent of participants are traditional public schools, 25 percent are charters, and 5 percent are private schools, said Lizzie Choi, chief program officer at Summit, who runs the SLP. There are pilot schools in 27 states, from Rhode Island to California. Some serve prosperous communities, others enroll primarily immigrants, and a few serve only special-needs students. Summit started with 19 partner schools in 2015–16 and added more than 100 new schools the following year. Typically, schools begin by implementing the Summit model at a single grade level, then add another grade the following year.



Schools pledge to use Summit's teaching model, which has three pillars: project-based learning focused on cognitive skills; self-paced learning to mastery in content areas; and one-on-one mentoring to help students set and meet goals. Student grades in English, history, and science are based 70 percent on cognitive skills, such as critical thinking, communication, problem solving, and collaboration, and 30 percent on content mastery. Math grades are based 30 percent on cognitive skills, 30 percent on mastery of basic concepts and procedures, and 40 percent on students' ability to apply those concepts when solving complex problems.

As schools implement the SLP, participating teachers from all over the country can collaborate via Facebook—troubleshooting problems, sharing project tweaks, and supporting one another.

"A teacher somewhere will ask: 'Has anyone had this problem? How did you handle it?'" said Michelle Staack, a math teacher at CICS Irving Park. "It's a great resource."

Throughout the school year, Choi said, Summit's software engineers talk to teachers about their "pain points"—the obstacles and problems they encounter—and try to find solutions.

For instance, when teachers wanted easier ways to design their own curriculum and share it with other teachers, the engineering team changed the platform to make it easier to customize and collaborate, said Sam Strasser, the platform's chief architect. "Projects are a cornerstone of the Summit learning experience," he said. "Seeing how important it is for teachers to know their learners, we built a tab [for] projects to help teachers easily see which students need support in which skills."

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Summit's Beginnings

Summit Public Schools did not start out to be a pacesetter in personalized learning. In 2003, it opened its first school, Summit Prep, which featured traditional college-prep methods and drew the children of affluent Silicon Valley professionals and working-class Mexican immigrants. The 400-student high school in Redwood City—midway between San Francisco and San Jose—became nationally known for its success in sending all its students through Advanced Placement courses and on to college. It was featured in the 2010 film *Waiting for Superman* and in 2011 was named one of the Top 10 Most Transformative Schools in the country by *Newsweek*.

However, in 2011, Summit CEO Diane Tavenner was surprised to learn that only 55 percent of Summit graduates had earned a bachelor's degree in six years. That was close to the national average, but far below what she'd expected.

"Graduates told us, 'you guys loved us too much,'" recalled Choi, who taught algebra before becoming Summit's chief program officer. Students were academically prepared but hadn't learned how to cope with large classes, long research papers, and other college challenges without the close guidance they had enjoyed at Summit.

By 2012, Summit "relaunched" the prep school with a goal of creating "self-directed learners" who could succeed in college.

To begin developing the personalized learning platform, teachers divided the Common Core standards into "focus areas" with (typically) three learning objectives each, a playlist of learning tools, and short assessments. They also designed projects to teach cognitive skills.

The Stanford Center for Assessment, Learning and Equity (SCALE) helped evaluate and refine Summit's cognitive-skills rubric, ensuring it was aligned to grade-level competencies and standards.

In 2013, Summit hired Strasser, co-founder of an education technology startup called Junyo, to work with teachers on building the platform.

Facebook CEO Mark Zuckerberg and his wife, Priscilla Chan, were so impressed by Summit's approach that Zuckerberg lent Summit a team of Facebook engineers and designers to help build the Summit Learning Platform.

The following year, Facebook CEO Mark Zuckerberg and his wife, Priscilla Chan, visited a Summit school. They were so impressed by its approach that Zuckerberg lent Summit a team of Facebook engineers and product designers to help develop the platform.

In (appropriately) a Facebook post, Zuckerberg has said Facebook and Summit are pledged to abide by "strict privacy controls to protect student data." Facebook itself has no business plans for personalized learning, Zuckerberg has said, but he is committed to providing the infrastructure for self-directed, personalized learning for free to all U.S. schools.

This year, the Chan Zuckerberg Initiative—the high-tech couple's foundation—will take over from Facebook as Summit's engineering partner.

Pomeroy 6th-grade teacher Sarah Thomsen (center) spent the summer before the 2016–17 school year analyzing projects provided in the SLP and tailoring them for her classroom.

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The Summit Way

The Summit Public Schools network now includes eight middle and high schools in the Bay Area and two high schools in Washington State, with a middle/high school slated to open in Seattle in fall 2017. The schools have attracted the attention of another education philanthropist: Bill Gates visited Summit Sierra in Seattle last year and praised what he saw on his "gatesnotes" blog. "At its best, personalized learning doesn't just let students work at their own pace. It puts them in charge of their own academic growth," he wrote.

Summit Sierra teacher Aubree Gomez showed Gates how the software lets her track the progress of each student she mentors. She talked with Jerald, a 9th grader, about his science project and his goal of getting straight As.

"He knew exactly what he had to do: which lessons he needed to finish, which tests he needed to take, and how high he needed to score," wrote Gates. "When students get out in the world, they have to organize their own time, have goals, and realize what they're behind on. It's fantastic to see them getting a head start on those skills in school."

More than 800 miles south of Summit Sierra, in south San Jose, Summit Tahoma high school serves 300 students; about half are eligible for a subsidized lunch and two-thirds are Hispanic. The school inhabits a cluster of gray portable classrooms next to Oak Grove High and, on the outside, doesn't look like a cutting-edge school.

Inside, in Emily Richey's 9th-grade English class, students are selecting and reading a nontraditional text, such as a political cartoon, video, or song about a social problem, and writing a paragraph that explains the text's point.

And in 9th-grade "Modern World I," Eileen Kim is teaching students to integrate evidence into their argument as they write an essay about the "zombie revolution." Eventually, students will choose a real revolution—Russian, French, Cuban, Egyptian, Mexican, or Iranian—and write an essay on whether it was "necessary."

Integrating evidence is one of the cognitive skills the project aims to cultivate, along with developing a theme or central idea, making an argumentative claim, selecting and explaining evidence, and contextualizing and synthesizing multiple sources.

While Summit students spend most of their time working on projects, 20 percent of the day is devoted to Personalized Learning Time (PLT), during which students learn academic content, choosing the digital tools they'll use to meet their goals.

"PLT is my favorite," says Ely Villagrana, a 9th grader.

Just as technology facilitates student learning, it also helps teachers connect with students, says Nicholas Kim, the school's executive. "We have so much clarity about what students know and can do. Teachers know exactly which kids need more help and what they need help with."

Yamileth Silva appreciates her mentor teacher's feedback on her poetry. "Not many people want to read a 9th grader's poetry," she says with a smile. Her favorite subject is math, though it's not her strongest, she says. "I like to be challenged." Her current goals are to earn a B+ in math and to improve her poetry.

Villagrana says his goal is to improve his soccer skills.

"What about college?" asks Kim. "Let's talk about adding an academic goal."

As they learn about social organization across different societies,

Pomeroy students work on a project creating their own culture within a community.

Culture Shifts

Four of the schools that are testing out Summit's learning program are in the Milpitas Unified School District, just north of San Jose. Once a blue-collar town with a Ford plant (now a shopping mall), Milpitas has gentrified with Silicon Valley. It's also drawn immigrants from Vietnam, the Philippines, and China, many of whom work in high-tech jobs.

In 2012, then schools superintendent Cary Matsuoka asked principals at all district schools to come up with redesign plans that would integrate technology; use data to inform instruction; allow flexibility in space, time, and student grouping; and center

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on student learning.

"My teachers said 'no way,'" recalled Sheila Murphy-Brewer, who was then principal of Marshall Pomeroy Elementary. She asked her staff to study how they might individualize instruction to reach students at different levels. Such extensive customization would be impossible, they concluded: teachers didn't have the time. That realization motivated them to try blended learning, said Murphy-Brewer. Still, implementing a new way of teaching was "painful."

By 2013–14, all the district's schools were using some form of blended learning, but Murphy-Brewer wanted to go further. After seeing personalized learning at Summit Denali, in Sunnyvale, California, she "begged" for a spot in the 2015 summer training. Her school piloted the SLP in the 6th grade during the 2015–16 school year.

Murphy-Brewer saw Summit's model as a good fit for Pomeroy: Because of the school's blended-learning pilot, its teachers already had some experience with self-paced learning. Summit's style of grading would be challenging, but not impossible, since Pomeroy already stressed cognitive skills. And Summit's Habits of Success meshed with Pomeroy's character curriculum.

Yet despite these commonalities, the transition to the new model wasn't easy. Pomeroy had a shorter school day and less flexibility than Summit charter schools did. Teachers were thus given the option of assigning Personalized Learning Time as homework. Mentoring, which is a lynchpin of the program, was new to Pomeroy's teachers. The SLP calls for weekly mentoring, but the teachers couldn't find the time for that during the school day. They settled on meeting with each student for 10 minutes every other week.

But the biggest hurdle for teachers, said Murphy-Brewer, was learning to teach to the standards through projects—rather than simply adding a project at the end of a lesson. At first, "teachers saw projects as a time-consuming add-on, not as a way of teaching," she said. That has begun to change as teachers see that students are capable of learning independently.

Math was particularly problematic. In the first year, teachers had to modify the math projects or "just teach the traditional way," said Matsuoka. "Math doesn't lend itself to project-based learning."

In response, Summit altered its math approach to focus on "concept units" as well as projects. "Summit has a humility," said Matsuoka. "When something isn't working, they change it."

After the first year, growth in English language arts was "exceptional" at Pomeroy and at Joseph Weller Elementary, which also piloted the SLP, said Matsuoka. Math scores remained about the same.

To his delight, students "took ownership of their learning. They were getting things done on time, searching for information. It was magical to see these 11-year-olds acting like adult learners, totally engaged."

Matsuoka, who became superintendent of Santa Barbara Unified in 2016, plans to use the SLP for a junior high school and a continuation school in his new district.

Pomeroy added 5th grade to the pilot in 2016–17, and teachers at the school continue to adapt the platform. After the first year, two 6th-grade teachers, Deanna Sainten and Sarah Thomsen, spent the summer analyzing the projects provided in the SLP. Some only needed "tweaks," said Sainten, who's in her 11th year of teaching. Others "you could tell were written by first-year teachers. They were grandiose." The two teachers rewrote some projects, adding new tasks and checkpoints. "We created our teaching plan for the year over the summer," said Sainten.

With students learning subject content at their own pace through the platform, Sainten said she is free to focus on "big-picture teaching."

"There's far more discussion and collaboration and more engagement," she said. "In the past, I was losing so many students on both ends" of the learning spectrum. "They were bored or they were confused."

That heightened engagement was evident in November 2016 when 6th graders read Long Walk to Water, based on the true story of one of the "lost boys" of Sudan who made it to the United States, then returned to his homeland to found Water for South Sudan. Student teams worked on ways to raise awareness of the need for clean water in South Sudan. They planned fundraising projects, such as recycling water bottles and holding a Christmas toy sale. They donated their profits—$4,500—to help build wells in South Sudan.

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At CICS Irving Park, students learn the chords for the ukulele in music class and then work independently or in small groups to select and then learn a song to perform for their classmates.

CICS Irving Park

Bringing the SLP to CICS Irving Park also was a challenge. The charter rents a yellow-brick building from the Catholic school next door. Two thirds of its students are Hispanic; 64 percent are eligible for a free or reduced-price lunch.

Irving Park had some experience with blended learning before signing up for the Summit program in 2016, but Karin Breo, the school's director, was aiming higher. "Our kids have been compliant and high-achieving but not engaged in learning," she said.

Breo held multiple meetings to explain personalized learning to parents. Teachers liked the idea of mentoring students and holding "office hours" to give students extra help, but, like Pomeroy's staff, they had trouble fitting it into the school day. "They were mentoring during breakfast, lunch, and PLT," said Breo. "They came in during winter break to do office hours." In February, Breo began paying teachers to meet with students after school.

But in other respects, the new model meant fewer demands on teacher time. Brandy Holton used to spend hours every night custom planning lessons for 7th graders at different levels, searching for resources, and creating videos. "It was exhausting," said Holton. Now, with most tools and materials included in the platform, "I'm re-energized. That teacher guilt is gone."

Last year, 25 to 30 percent of her students were struggling academically, she estimated. This year, that's down to 10 to 15 percent. Students are successfully "grappling with this new way of learning. It makes them so much stronger."

In midyear, students—most of them from Latino families—studied the Aztec empire's clash with the Spanish conquistadors. They each selected an Aztec character—male or female, merchant, warrior, Montezuma—and researched what their character's life might have been like in 1520. The next step was to write about one of seven topics from that character's point of view.

"I've never seen students love history like this," said Holton.

Staack's math students also are more engaged. When a project required students to plan a hypothetical business, one group devised a scheme for selling giant cupcakes. Another conceived of a food truck affiliated with the Chicago Cubs that would follow the team to away games.

As for the teacher, she's less stressed. "I don't have to find resources and design assessments," said Staack. "It's all there in one spot."

This has been the "most rewarding teaching" he's ever done, said Kevin Kreller, who teaches 8th-grade English. He has more time to give students "real, meaningful feedback" and build relationships.

His students listened to the Serial podcast about a teenager accused of murdering a classmate, analyzed the evidence in Socratic seminars, and wrote opinion papers that impressed Kreller with their thoughtfulness. "They were so focused," he said. "We're tapping into their real potential, not just going through the motions."

Given the success of the middle school pilot, Distinctive Schools, which manages the CICS schools, plans to implement the SLP in the network's three high schools.

What's Next?

There is no evidence yet as to whether the Summit approach prepares students to succeed in college better than other methods do; the program is too new. But Summit has reported first-year results for SLP partner schools: Growth on the Northwest Evaluation Association's Measures of Academic Progress (NWEA MAP) exceeded national averages in reading and, very slightly, in math. Gains were greatest for low achievers, who improved significantly in both subjects.

After one semester of personalized learning, CICS Irving Park analyzed data for 6th-, 7th-, and 8th-grade students. In reading, students in all three grades showed higher growth than they had the previous year; growth in math was similar to the previous year, except for 7th graders, whose improvement was slightly better.

Currently, about 38 percent of Summit's partner schools are

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middle schools, 24 percent are high schools, and 13 percent are elementary schools. (The remaining 25 percent have other configurations, such as K–12 or K–8.) Summit is adding content for younger students on the platform, which now covers 5th through 12th grade. It also plans to develop a rating system so teachers can evaluate each other's curriculum and project ideas.

The SLP's adaptability may be the key to its future. Because it's an open-source system, the platform will keep improving, in the view of Mark Kushner, who heads +Impact School, a private Expeditionary Learning high school in Lake Tahoe, California, that uses SLP. "We plan to add new content units, new projects, and new assessments" to share with other SLP schools across the country, said Kushner, a serial school founder and blended-learning innovator.

Across the country, cloud-based personalized learning platforms are moving beyond their founding school networks, wrote Julia Freeland Fisher, director of education research at the Clayton Christensen Institute. In addition to the Summit Learning Platform, others to watch include Matchbook Learning School's Spark, Brooklyn LAB's Cortex, AltSchool's AltSchool Open, and the Gooru learning navigator from Leadership Public Schools.

Summit and AltSchool, which received a Zuckerberg donation, provide integrated learning systems, said Tom Arnett, a Christensen researcher specializing in blended learning. That means "they've designed their instruction and their technology together." But such comprehensiveness comes with advantages and disadvantages: "They've made it work in their schools, but how do you specify the professional development and the instructional model so that it works in other school systems?"

By contrast, other platforms are less exhaustive but more modular: "You bring in your content and lesson materials and plug them in," Arnett said. "It's more challenging to do that, but it offers greater flexibility" for schools to customize the program to their own needs.

The "future of education is more personalized learning," Arnett asserted. Not everyone concurs, and educators often disagree on how to define it. Personalized learning is still evolving. Will Summit's model prove to be the gold standard? According to Arnett, "That remains to be seen."

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SUmMIt LeARNing

Summit Learning is a personalized approach to teaching and learning inspired by the vision to equip every student to lead a fulfilled life, one of purpose, financial independence, community, strong relationships, and health.

About the Program

Summit offers support to schools who want to implement and tailor Summit Learning for their community. The free Summit Learning Program includes the Summit Learning Platform, curriculum and assessments, in-person professional development and training, and ongoing support and mentorship.

About the Community

The Summit Learning Community now includes over 330 schools, 2400+ teachers, and 54,000+ students. It consists of 78% district, 16% charter, and 6% independent schools.

This community of partners is adapting Summit Learning to meet the specific needs of their individual classrooms and schools. What they all have in common is a desire to reach every single student, providing them with a personalized education that equips them to live the life they want to lead.

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Summit Learning website

Summit Learning blog

Summit Public Schools virtual tour

Summit Learning YouTube channel

Video: Summit Learning in Action at Chicago's Lee Elementary

Video: Summit Sparks Texas-Sized Success at Pasadena Independent School District

Video: Personalized Learning at Summit Public Schools

Flyer: About Summit Learning

Additional Resources

Examples of published work

EdSurge, "Inside Summit's Mission to Redesign Schools," by Diane Tavenner, 4/7/15

Blend My Learning, "It's About Self-directed Learning," by Diane Tavenner, 12/18/12

Blend My Learning, "Embarking on Year Two: Moving Beyond Blended Learning," by Diane Tavenner, 11/27/12

Michael and Susan Dell Foundation, "Moving Beyond Blended Learning to Optimized Schools," by Diane Tavenner, 9/6/12

Press samples

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The New York Times, "Facebook Helps Develop Software That Puts Students in Charge of Their Lesson Plans," by Natasha Singer and Mike Isaac, 8/9/16

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Next Gen Learning Blog, "Summit Public Schools CEO Shares Insights with Next Gen K-12 Pioneers," by Stefanie Blouin, 1/20/15

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Links to videos and/or presentations available online

"Equipping All Students for the Life They Want": Keynote by Diane Tavenner, **ASU GSV Summit 2017**

"Reshaping Schools Through Personalized Learning": Keynote by Diane Tavenner, **EdSource Symposium 2016**

"Engineering Personalized Learning: The Story of Summit Schools and Facebook": Panel at **Harvard Graduate School of Education Askwith Forum, 5/5/16**

Bill Gates interviews Diane Tavenner at **2013 SXSWedu Conference**

Presentation at **Porvir Transformar Conference, 4/4/13**

Presentation at **Lean Startup Conference 2012**

Dreamer of the Year 2012 Award interview with the Young Dreamer Network, 4/16/12

Other websites and online information

Summit Public Schools website

Biography on Carnegie Foundation for the Advancement of Teaching website (Diane Tavenner serves on the Board of Trustees)