



Schools of the Future:

California's Summit Public Schools

BY DAVID OSBORNE

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The first time I visited a Summit Public School, in February 2014, I pulled up in front of a long, low, one-story building in an office park setting. 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. One was on a sofa, reading. 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 the last 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 said. "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."

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 said. "This is what high quality teaching does well, so this is where the teachers spend a lot of their time." Students spend 16 hours a week in project time.

About the author

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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 learning math, language, science, history, and the rest, using online resources Summit’s teachers had put together.

Teachers were there to answer questions, make suggestions when kids got stuck, and check their progress, but students were in charge of their own learning. They 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 said—non-cognitive skills such as the ability to set a goal and meet it, to persevere, to overcome setbacks, and to work with others. Summit teachers try to 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. During weekly mentor-time meetings, students review their personalized learning plans with their mentors, track their progress, and reflect on their learning. Teachers devote at least 200 hours a year to mentoring and coaching, while also serving as college counselors and family liaisons.

Summit focuses on four big things: cognitive skills, content knowledge, real-life experiences, and the “habits of success.”

Finally, Tavenner said, “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



Diane Tavenner, Summit's co-founder and CEO

experiences, whether it’s at camp, or through travel, or through volunteer work. Poor parents have a tougher time doing 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 said.

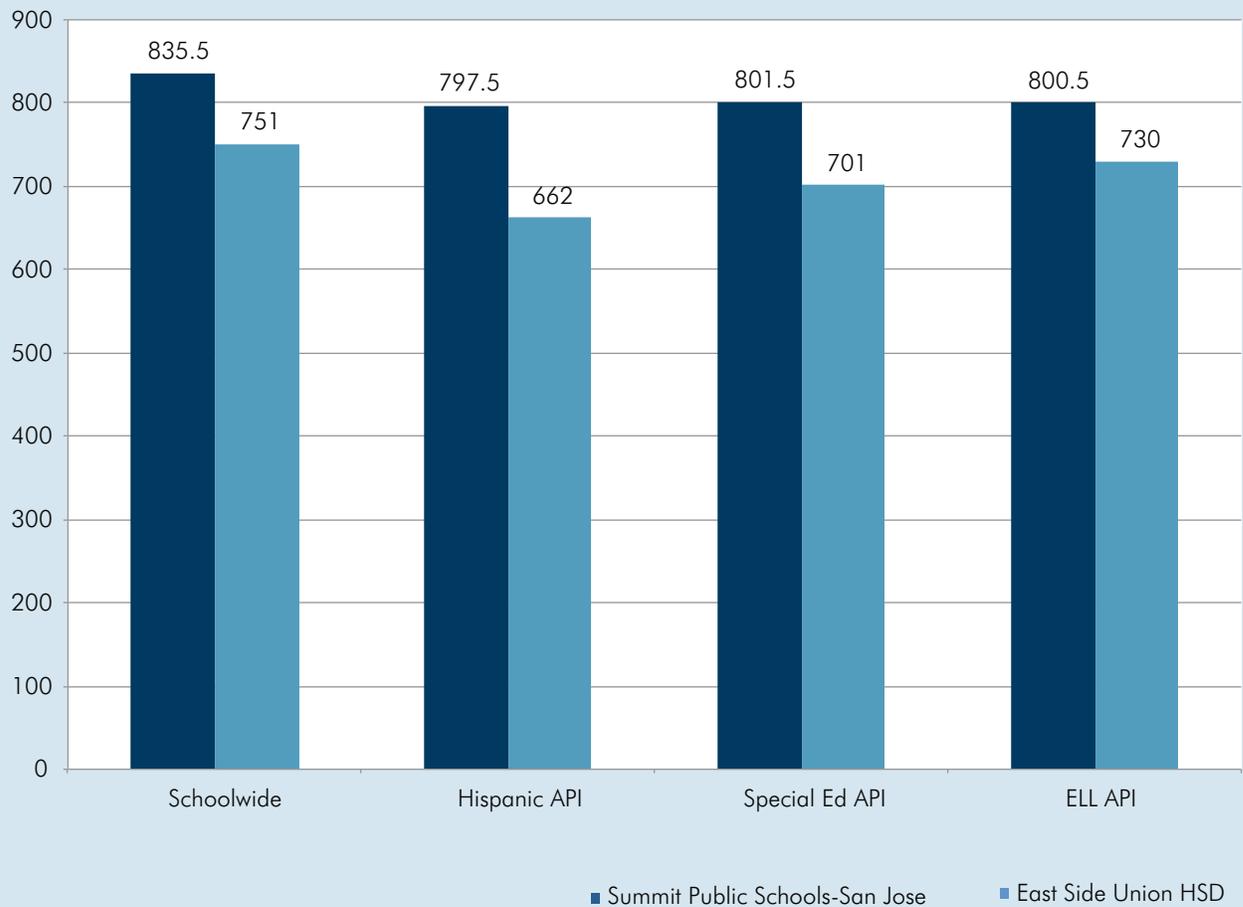
I walked out that day feeling like I had glimpsed the future.

TRANSFORMATIVE SCHOOLS ON A SHOESTRING BUDGET

Tavenner founded Summit Prep Charter High School in 2003, in Redwood City, a working class city half way 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, six percent are African American, seven percent are multiracial, 12 percent are English language learners, and 42 percent are low income (qualifying for a free or reduced-price lunch).¹

FIGURE 1: SUMMIT 2012 API SCORES VS. EAST SIDE UNION HS DISTRICT, IN SAN JOSE



Source: Summit Public Schools

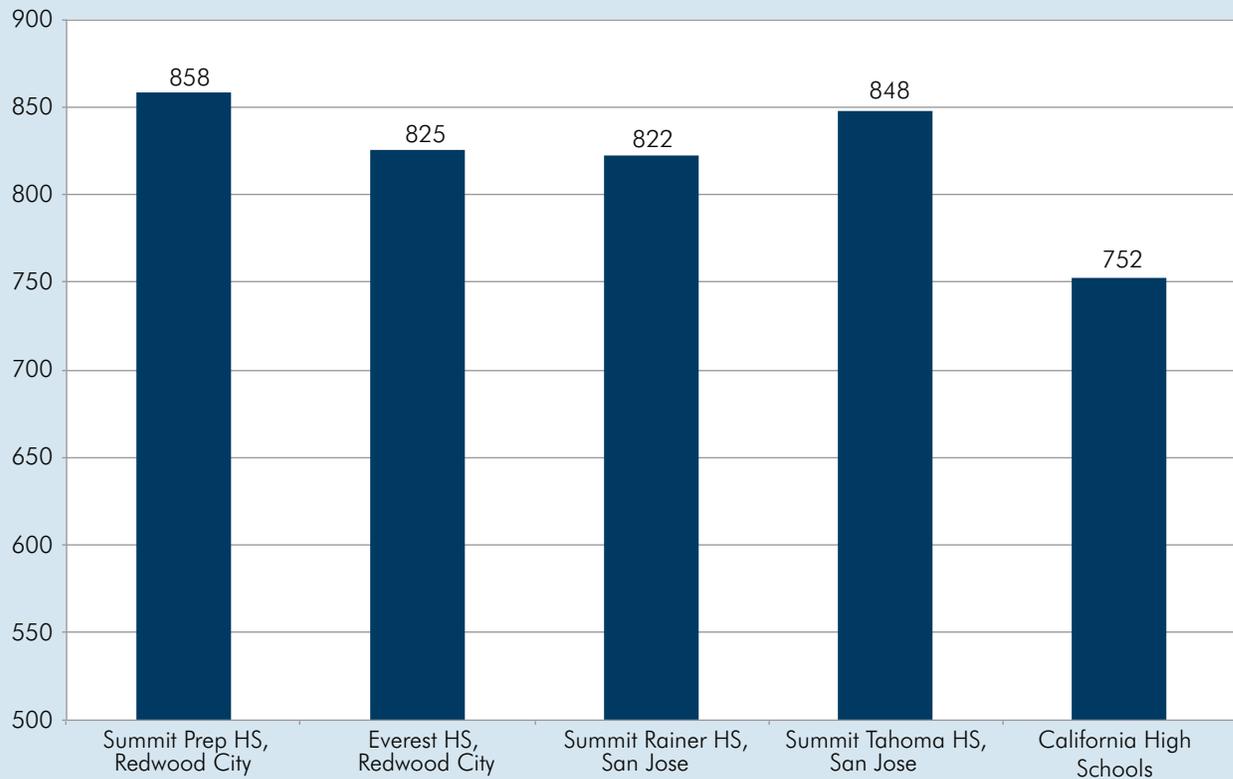
From the beginning, Summit was remarkably successful. Summit Prep has been named one of the nation's top 50 high schools by *U.S. News & World Report*,² one of the "Ten Most Transformative Schools" by *Newsweek*,³ and the best high school in Silicon Valley at preparing Latino students for college, by Innovate Public Schools.⁴ It was one of five charter schools featured in the documentary, *Waiting for Superman*.

California measured school performance using an Academic Performance Index (API), based on test scores. Scores ranged from 200 to 1000, with the state target for a successful school set at 800. Though Summit students arrived with "slightly lower scores

than their peers at local high schools," according to Summit, they routinely outperformed the surrounding districts, as the graphics illustrate.

Summit accomplished all this on a budget of \$7,000 per child—half of what charters receive in many states, a third of what they receive in Washington, D.C. The organization raises additional money to start new schools, which open one grade at a time, subsidizing them until they are fully enrolled at 105 students per grade. The majority of its facilities are bare bones; for playing fields, students walk to nearby parks. Three of Summit's high schools are housed in prefab classrooms sandwiched into a corner of a traditional public high school's grounds.

FIGURE 2: SUMMIT 2012 API SCORES VS. CA. AVERAGE



Source: Summit Public Schools

Over its first decade, 96 percent of Summit’s graduates were accepted to four-year colleges.⁵ 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 in six years. This was higher than the national rate of about 42 percent⁶—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, while also talking with foundation staff and other charter management organizations (CMOs) that were grappling with the same challenge. They learned two big things, Tavenner says. First, a third

of their graduates had to take remedial classes in college, mostly in math. Nationally, the vast majority of those who need remedial classes don’t finish college,⁷ so this was a “death sentence” for those students’ college hopes. 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 new high schools in San Jose. (Blended learning is ed-speak for the use of educational software.) “It was very rudimentary,” says Tavenner. Students spent a third of their time in class with a teacher, a third in small groups doing projects and practicing what they were learning in class, and a third using Khan

Academy videos and exercises to fill any gaps in their learning. Teachers used data from online assessments to see where students were struggling, then worked with them individually or in small groups to help them master the material. Khan assigned three developers to work with Summit and used the pilot to flesh out its offerings.

It worked. “Students liked the immediate feedback of online data that Khan Academy provided, and began progressing faster through the exercises,” the consulting firm FSG reported. “They were more engaged in their work than teachers had ever seen before.”⁸

More important, they were better able to “fill their learning gaps” than Summit’s high school students had ever been. Two-thirds achieved higher growth on standardized (NWEA MAP) tests than the national norm, and the lowest performing students showed the fastest growth.⁹

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.

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.

“We had created a culture of high expectations and high support—whatever it takes, we will ensure that our students make it through our school and into college,” Tavenner says. “This is what is known as the no-excuses model in a lot of schools.” They knew they needed to start “taking the scaffolding away” as kids got older, so they would be ready for college, but



Summit Rainier High School, whose prefab buildings occupy one small corner of the Mt. Pleasant High School campus in San Jose, California.

they had never developed a strategy to do so. “We realized that probably did them harm, because they didn’t have the skills, they hadn’t built the capacity to deal with things themselves.”

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.

REINVENTING THE SUMMIT MODEL

One of the most surprising things about Summit is that it operates through consensus, on most decisions. A project team does research, pulls together a package of information, and develops a proposal. The information and proposal go out to the entire organization, which then has time to ask questions at open-door meetings and on Google Docs. Based on their feedback, the team tweaks the proposal. Finally, there is a meeting at which every staff member gets a vote. If one person gives it a thumbs down, the proposal dies—but that person is expected to make a counter proposal, and the process begins anew.

It sounds like a nightmare, but it creates enormous buy-in from teachers and staff. To launch its redesign, Summit held a two-day Innovation Summit and invited every staff member. They brainstormed new approaches and designed their dream schools. When everyone designed something different from the current model, Tavenner says, it created a shared urgency to change the model.

They decided to start by piloting a more thorough redesign of ninth and tenth grade math—in which students moved at their own pace, rather than with a teacher and class—at the two San Jose high schools. Tavenner chaired a 15-person project team, which included Summit's leadership, its school directors, and the 9th and 10th grade math teachers from those two schools.

“In education, our approach to improvement is usually on an annual basis,” Tavenner explains. Ordinarily, schools make changes over the summer and implement them the next fall. But Summit needed to go faster.

They adopted the “Build-Measure-Learn” cycle popularized by Silicon Valley author Eric Ries, in *The Lean Startup*. Ries advocates building a “minimally viable product,” trying it out quickly, and measuring the results. Summit uses student, teacher and parent surveys and focus groups, plus academic results, to tell what works and what doesn't, then either abandons the idea, adapts it, or adopts it.

“In education, our approach to improvement is usually on an annual basis,” Tavenner explains. Ordinarily, schools make changes over the summer and implement them the next fall. But Summit needed to go faster. In 2012-13, the project team went through 67 different iterations—a pace that even Tavenner admits was “a little insane.” It did weekly focus groups with students to get feedback.

They tried using volunteer math tutors, for instance, but learned that students didn't like working with

strangers. So they tried seminars students could take to fill knowledge gaps. Those too failed, until enough kids drifted away that only a few were left. What really worked, the remaining students told them, was one-on-one interaction with a teacher. So they created a “Tutoring Bar” during personalized learning time, which a student could approach at any time with questions. And that evolved into the way things are done at all Summit schools.

During the first pilot they had contracted with a firm called Illuminate to develop a new student information system. In year two, with funding from the Girard Foundation, they worked with Illuminate to build a platform through which students could access a variety of “playlists”—different learning options, including videos, exercises, interactive practice problems, and explanatory texts—to learn a topic at their own pace.

Again the pilot worked, and again the students who started the furthest behind—three or more grade levels—experienced the most rapid growth. English language learners and low-income kids also achieved some of the greatest gains.¹⁰

By 2013-14 all of the organization's schools had decided to use the new model, in all subjects. In May 2013 Summit had hired its first full-time software engineer. Later that year Facebook founder Mark Zuckerberg visited. Inspired, he asked Tavenner what it would take to bring Summit's personalized model to more schools across the country. This led to a “secondment agreement,” by which Facebook provided six engineers for free. They helped Summit develop a full-fledged, scalable Personalized Learning Platform, for all subjects. Counting the Facebook contributions, Tavenner says, Summit has invested nearly \$8 million in research and development.¹¹

THE PERSONALIZED LEARNING PLAN (PLP)

The PLP is the backbone of Summit's approach. Summit teachers started by taking the Common Core standards and breaking them down into usable learning chunks. (To their dismay, no one else had done that.)

They created a guide for each topic, in math, science, English, history, college knowledge, and academic and financial literacy. They created diagnostic

assessments students take to see what they already know and what they still need to learn. Then for each topic, they put together an overview and a series of focus areas, each one broken down into about three learning objectives. For each focus area, they built a playlist students can choose from to learn the content—guided practice problems, presentations, videos and much more. They also created a pool of multiple-choice questions for the 10-question assessments students take to demonstrate they have mastered the content. By June 2015, Summit had more than 700 playlists, with associated assessments.¹²

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. Students 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.

They get immediate feedback from the assessments—a far better learning method than tests they get back three or four days later. To pass a subject they must demonstrate mastery of all

objectives in the required “power focus areas;” there are optional focus areas they can master to improve their grades.

Students use the PLP to plan their projects and schedule each step. There is also a place for their reflections, as they move through projects and playlists.

Finally, teachers work with students to create a roadmap to their future on the PLP. Students set goals, plan what they need to do to reach their goals, and review their progress with their mentors. The PLP shows them where they are—whether they are on track to attend a selective college, for instance.

The self-directed approach was a huge change for students accustomed to sitting back and listening to teachers talk. According to Tavenner, it was easiest for sixth graders: they had had less of the lecture experience, and they were starting middle school, which they expected to be different. It was toughest for juniors and seniors in high school, who had put in the most time under the old system.

At first some students took the assessments over and over, without using the playlists. This gave

The screenshot displays the 'Personalized Learning Plan' interface for a 'Demo Student'. The interface is organized into three main sections for subjects: English 9, Physics, and Math 9. Each subject section includes a grid of tasks categorized by 'Cognitive Skills', 'Power Focus Areas', and 'Additional Focus Areas'. The tasks are color-coded: blue for completed, red for pending, and green for in progress. A vertical line separates the 'THIS YEAR' tasks from the 'THIS WEEK' tasks. The 'THIS WEEK' column highlights current tasks.

Subject	Cognitive Skills	Power Focus Areas	Additional Focus Areas	THIS WEEK
English 9	4.5	3/7	2/5	
	Personal Narrative (✓ Oct 3)	Film Review (✗ Sent Back)	Argumentative Presentation (✓ Dec 19)	Socratic Seminar (In Progress • Due Feb 24)
	Figurative Language 2a	Theme 1	Theme 2	Literary Analysis Essay
Physics	5.0	2/7	5/5	
	Energy Models (Submitted)	Wave / Sound Project (✓ Dec 19)	Electric House (In Progress • Due Feb 11)	Design Your Own Physics Experiment
	Wave Basics	Newton's First Law	Electromagnetism	Energy Basics
Math 9	2.5	4/7	2/5	
	Graphing Stories (✓ Oct 17)	Infographic (Submitted)	Booming Populations (In Progress • Due Feb 13)	Solid!
	Solving Linear Equations	Understanding Functions	Arithmetic & Geometric Se.	Forms of Linear Functions

A personalized learning plan screen that helps a student see their progress through each subject during an academic year.

The screenshot shows a web interface for a personalized learning plan. At the top, it says "Personalized Learning Plan" with navigation links for "GOALS" and "REFLECTIONS", and a user profile "Demo Student". Below this, it indicates "THIS YEAR / PHYSICS".

The main focus area is "Electromagnetism" under the "Power Focus Area". It states, "You took this content assessment on Thursday, February 21, 2015 and scored: 6/10".

There are three learning objectives listed with their progress:

- Explain how magnetic fields form from current carrying wires. 3/4
- Explain how an electromagnet works. 0/2
- Explain how a simple electric motor works. 3/4

A blue button labeled "REQUEST CONTENT ASSESSMENT" is visible.

On the right side, there is a "Description" box: "By the time you finish this playlist, you should have a clear understanding of how magnetic fields relate to permanent magnets and currents, and how electromagnets are used in simple electric motors." Below this is a "TAKE DIAGNOSTIC ASSESSMENT" button.

A "Key Terms" section lists: permanent magnet, magnetic domains, current, magnetic field, tesla, solenoid, electromagnet, electromagnetic induction, and magnetic flux.

Under "Objective 1: Explain how magnetic fields form from current carrying wires.", there are three video resources:

- Magnets: How do they work?** - This video helps break down the mysterious power of magnets.
- Electrons and Magnetism** - Describes what makes up a basic bar magnet, and how different types of magnets interact.
- Check for Understanding** - Assess your own understanding of this learning objective.

A personalized learning plan screen that shows the objectives and playlists for one focus area, on electromagnetism, in physics.

The screenshot shows a web interface for a personalized learning plan. At the top, it says "Personalized Learning Plan" with navigation links for "GOALS" and "REFLECTIONS", and a user profile "Demo Student". Below this, it indicates "THIS YEAR / MATH 9".

The main focus area is "Booming Populations" under the "Project" category. It is marked as "In Progress".

A "Performance Task" is described: "A written report for a simulated summit on population change around the world, predicting the population in a developing country 50 years from now." A "DOC" icon is next to it.

A "Cognitive Skills" section shows progress:

- Modeling: 4 / 6
- Comparing / Contrasting: 5 / 6
- Interpreting Data / Info: 3 / 5
- Conventions: 6 / 6

A calendar view for "January 28 - February 13, 2015" is shown. The calendar has columns for days of the week (Su, Monday, Tuesday, Wednesday, Thursday, Friday, Sa) and rows for dates. Tasks are assigned to specific dates:

- Tuesday, 28: Choose a country, research its background, and prepare to share.
- Thursday, 30: Interpreting Data/Info: Gather population data & build spreadsheet.
- Monday, 04: Interpreting Data/Info: Create scatterplot & analyze trends.

Below the calendar, there are two sections:

- Project Library:**
 - World Population Data Visualization** - A neat animation that could inspire your work.
 - Population Growth Article** - This summary of the topic of population growth should help get you accustomed to what's
- Unplanned Steps:**
 - Modeling: Use linear & exponential models to make a "prediction" for 1990-2015.
 - I will submit my performance task two days early for feedback.

A blue circular button with a pencil icon is located at the bottom right.

A personalized learning plan screen that shows a student's schedule, achievement grading, resources, and unscheduled steps for a project on population growth (a written report predicting population growth over 50 years in a developing nation).

their mentors an opening to talk with them about what it means to learn something, and what other strategies they might use. Eventually, a light bulb usually went off.

At Everest High School, teacher Jenny Macho told me that of 13 kids in her mentor group in 2013-14, “One of them got it immediately, and a few picked up on it fairly quickly. A lot took most of the year to adjust, but by end of year everyone in the group had passed all their classes and had done slightly better than they had the year before. All of them were saying, ‘I got it, next year is gonna be great.’”

I talked with about ten students at Summit Rainier, a high school in San Jose, some of whom were in their third year with personalized learning. All but one said they preferred the new approach; the holdout said he struggled with it because he was “easily distracted.”

“Self-directed learning is way better for me,” one told me. “Instead of taking a whole day to learn one thing, I could learn three or four things.”

“It’s really good for people who want to work ahead,” another added. “But if you’re not always on top of it, you may fall behind. I kind of prefer this, honestly, because you have a little bit more freedom to do what you want, and you don’t get as bored. Because when you’re sitting in class listening to a teacher, you get bored easily.”

Summit added one more piece of personalized learning, because 60 percent of its students entered Summit behind grade level in reading. A “big chunk” were one to three years behind, Tavenner says, another big chunk even further behind. So they tried various strategies and came up with “Summit Reads”—30 minutes a day in which every student reads. Those on grade level use an online program called Curriculet, which includes reading, photos, and videos and poses questions every few pages. Those one to three years behind use a program called Reading Plus, which has generated “phenomenal growth,” according to Tavenner. And those even further behind get small group reading instruction, which also yields rapid growth.

Summit Reads was so successful that in 2014-15 Summit added “Summit Solves,” in which students

spend 30 minutes a day practicing their math skills, at their own level and pace.

DEVELOPING HIGHER-ORDER SKILLS

Content knowledge is only 30 percent of a student’s grade. The other 70 percent comes from projects, designed to enhance students’ cognitive skills. According to Mira Browne and Betty Chen, from Summit’s Development and Communications Teams, Summit has developed some 200 projects, where students “solve authentic problems, work in teams, develop strong communication skills and think critically.... For example, instead of just solving algebra equations in math class, our ninth grade students

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are using mathematical models to predict growth in the stock market. In science class, our seventh graders are becoming chemical engineers and designing innovative products that prevent heat exhaustion in athletes. With each of these projects, students are presenting their recommendations to the class and gaining valuable feedback from their peers and teachers. These skills are the building blocks to becoming strong leaders, team players, and creative problem-solvers.”¹³

While students are working on projects, their teachers guide them to the content they need to master, through their PLP, to complete the project. They also help them develop a calendar for the project, with deadlines for each task, and give them feedback along the way.

When I talked with Sean Griffin, who teaches ninth grade biology at Summit Rainier, he had just come from a public school in Delaware, where the focus was mainly on content knowledge. Here “the content exists, and you’re guiding kids to get it, but also there’s this focus on skills that are going to help a child grow into an effective student in college, and



hopefully an effective” member of society and the workforce, he told me. “That was a massive shift for me.”

His students were working on a bioremediation project—using living things to clean up the environment. They were using a type of plant to pull toxins out of the soil. In the process, they had to master seven or eight skills, such as identifying variables to build an appropriate hypothesis.

Peer-to-peer learning is one of the most effective forms, according to academic research.¹⁴ Summit uses it extensively, often asking students to work in pairs or teams and to tutor other students. Teachers put together a rubric on each project and skill, and the students grade each other on the rubric. “They’re more perceptive than we give them credit for,” Griffin says. “They’ll tell each other, ‘Hey, you forgot to do this.’ That keeps more kids on track

than if I sit there and go kid by kid by kid. And it pushes kids to think more critically about their own work.”

Brian Johnson is a former teacher and school leader at Summit Prep High School, who decided to return to the classroom to teach middle school science at Summit Denali. “I always wanted to get kids to become good scientists, but I had to spend so much time just getting through the content,” he says. “Now I have time to help them learn those scientific skills, like preparing labs and developing experiments and analyzing information. I feel reenergized. I feel like I’m so much more effective now, like I’m really teaching them what they need to know.”¹⁵

And “kids love it. They love that they can manage their own time and their own work. They are so much more accountable to each other; they don’t want to let each other down.”¹⁶

THE HABITS OF SUCCESS

Teachers also help students learn “five behaviors of self-directed learning,” which draw on the work of David Yeager, a psychology professor at the University of Texas. These include seeking challenges, persistence, shifting strategies, seeking appropriate help, and responding to setbacks.

Summit holds seminars on these five behaviors, and teachers reinforce them in their daily interaction with students. “We believe the key is a lot of practice and a lot of coaching,” says Tavenner.

They work on the habits of success by helping students set and meet goals, which are tracked on their personalized learning plans; asking students to write reflections on how they are doing once a week; and sitting down for weekly check-ins with each student. But perhaps the most important setting is “community time.”

In high school, groups meet with their faculty mentors in community time for a little more than an hour, once a week. They also get together for ten minutes at the end of every day. The mentors lead discussions and activities, often focused on a habit, such as responsibility, integrity, courage, or compassion. When they were discussing persistence one year, for instance, they showed a short film about a woman runner, Tavenner says—“an incredible story where she beats all the odds to cross the finish line.” The groups watched it and the mentors then led discussions about it.

“When you ask our alumni what they remember,” says Kevin Bock, the assistant director at Summit Rainier, “the first thing they go to is their mentor group.” They make meaningful connections, “often with people who they would not have connected with otherwise.”

I heard the same thing from Estafania Salto, then a sophomore at Everest: “The thing I most like about this school is how attached we are to people we wouldn’t usually be attached to. In most schools kids just hang out with their own race. But here I talk to people from other races, and they’re really nice.”

Community time is also when school rituals take place. Schools give “student of the month” and

“student of the year” awards, built around the habits of success. “The whole school comes together,” Tavenner says. The teachers select the awardees, and they write “beautiful narratives and read them in front of the school about the kids. We give them a piece of paper and a hug in front of everyone.” It’s not for the student who got the best grades, “it’s the kid who worked the hardest.”

At the end of ninth grade each student has to give a persuasive speech about an issue they feel passionate about. They speak first to their community group, where their peers rate them. The best speakers go on to present before a larger group, and, if they are chosen as one of the eight best, to the entire school. “It’s all about iteration,” Tavenner says—“kids improve every time they do this.”

“It’s a really amazing experience. We had one kid who really struggled with a stutter. It was a huge deal that he was able to do this speech. They go through all this process to perfect their speeches

“[Our teacher] led us into a discussion about what the Summit community was about, and how we were all coming to learn, to get an education, and to succeed. And how school was not about creating winners and losers, but to be successful.”

and delivery. He kept getting moved along until they wanted him to be one of the eight.” He had developed a series of strategies to avoid stuttering, but “his mom almost didn’t let him do it—she was afraid he would stutter and it would be terrible for him.” So his mentor went to his house and convinced her.

“I don’t think he would have ever given a speech in his life without that,” Tavenner says. “He gave the speech perfectly. His mom still says she learned that day what he was capable of.”

Tavener teared up at this point and had to pause for a long moment. “I think it changes you,” she finally said.

Jimmy Zuniga graduated from Summit Prep, attended Tufts University, near Boston, and now teaches at Everest High School. “I’ll always remember this workshop we did” during orientation before ninth grade, he told me. “A group of about 20 of us walked into room six in the Summit Prep building, and all the desks were pushed against the walls, and there was a mound of blue balloons waiting for us in a corner. One of my future teachers was waiting in the middle of the room. He instructed us to pick up a balloon and grab a pencil from him. He said, ‘We’re going to play a game, and the point is if you survive 60 seconds with your balloon intact, you win.’ I ran under a table and waited for it all to be over, because it was like bombs on a minefield. Finally he said, ‘OK, stop.’ We all sat down and collected ourselves, and he said, ‘I never said you had to pop anyone’s balloon.’”

“He wanted us to be shocked by that statement, and he led us into a discussion about what the Summit community was about, and how we were all coming to learn, to get an education, and to succeed. And how school was not about creating winners and losers, but to be successful. And how we were going to shift how we thought about school, we were going to be collaborative. If we had not popped each other’s balloons, we could have all won.”

In schools before Summit, Jimmy had been in the upper track, and he hadn’t known kids in the lower tracks. “It was sad—a lot of my classmates had spent their entire lives in lower tracks in bad schools, and this had a significant impact on their self-assessment and long term goals.”

Summit broke that pattern. It deliberately created very heterogeneous classes and mentor groups. “And I knew at that young age that this was right, this was socially just, that we organize schools in ways that don’t teach people that they’re not good enough.

“I used to say that it took a while for kids to get Summitized. They got here, and often their parents had forced them to go here, because they had gotten kicked out of another school, or were failing. A lot of them didn’t want to be here. A key part of the

Summit model is our culture, and the deliberate community-building. Teachers spent a lot of time and energy trying to get to know students and trying to create opportunities for students to get to know one another, and trying to create this community that is safe and inclusive for everyone.

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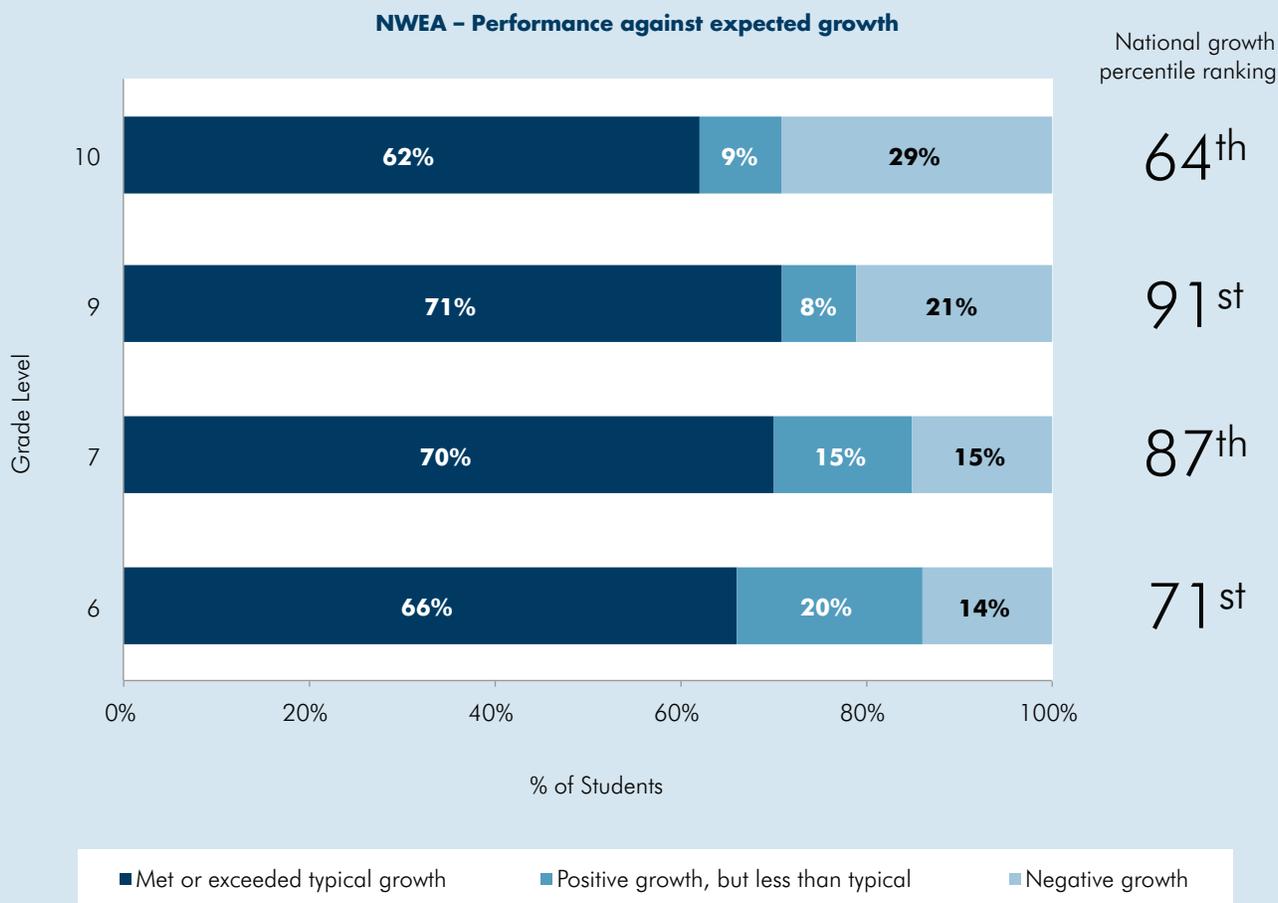
“Once you start to build relationships with your peers, and your teachers, even if you don’t want to do the school work, you don’t want to disappoint your classmates and your teachers. Those relationships are leveraged so students start putting more effort into their schoolwork.”

THE NEW ROLE OF THE TEACHER

Teachers at Summit focus more on helping students develop skills than on teaching them content. “Some really good teachers don’t want to give up their focus on content; they see themselves as the font of knowledge, and they want to pass it on,” says former Summit leader Jon Deane, now with the Bill and Melinda Gates Foundation. Summit has lost a few such teachers, but it has found far less resistance among young teachers.

Still, says Deane, “we have to train for this.” Summit makes an enormous investment in professional development. Teachers get two weeks of professional development time, four times a year, while their students are on expeditions. (A separate team of teachers leads expeditions.) They also get ten days of more structured time and 30 days of paid time during the summer. Knowing that motivated learners learn a lot more, however, Summit’s leaders let teachers choose what works for them most of the time.

FIGURE 3: 2014-15 NWEA MAP MATH GROWTH HIGHER THAN NATIONAL AVERAGE IN ALL GRADES



Source: Summit Public Schools

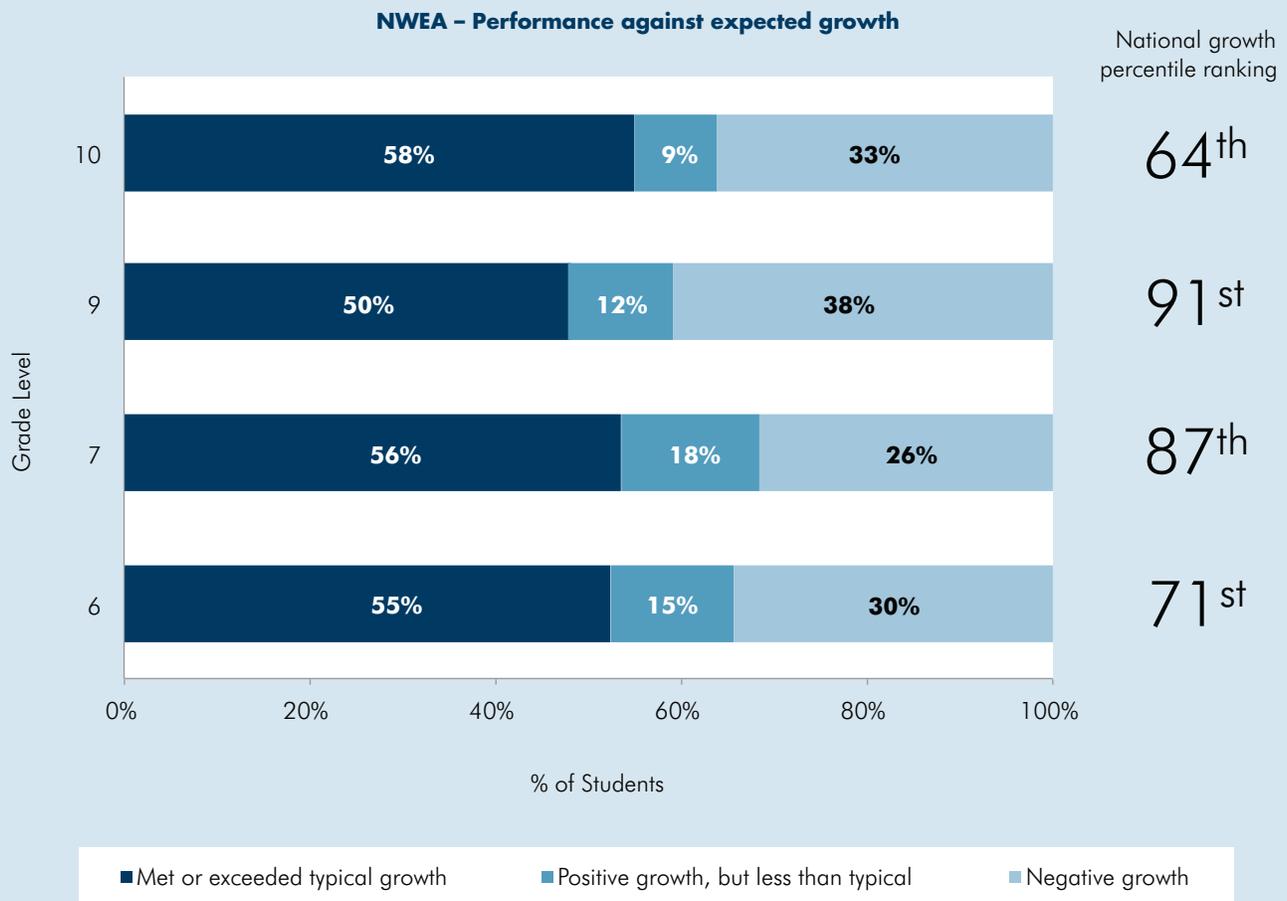
Teachers all have coaches, and during their two-week professional development breaks, they and their coach set goals. Some are personal and some are team goals, such as coming up with a solution to a problem. Then they plan together how to reach those goals. Some attend workshops; some go to another Summit school to watch one of their colleagues teach; some even co-teach with a colleague, to learn something they will teach in the future. And true to its pedagogical philosophy, Summit is developing a Professional Development Platform, with playlists teachers can use to develop their skills and habits—full of videos, articles, exercises, and other learning tools.

The teachers I spoke with at Summit were engaged and happy with their work. They said the two-week professional development breaks gave them a respite from the pressures of teaching and helped mitigate the burnout rate so many successful charter schools experience. Summit claims to have retained more than 80 percent of its teachers within the organization, as it has expanded.

THE BOTTOM LINE

As the new approach has become the norm, results have continued to improve. In California, 27 percent

FIGURE 4: 2014-15 NWEA MAP READING GROWTH HIGHER THAN NATIONAL AVERAGE IN ALL GRADES



Source: Summit Public Schools

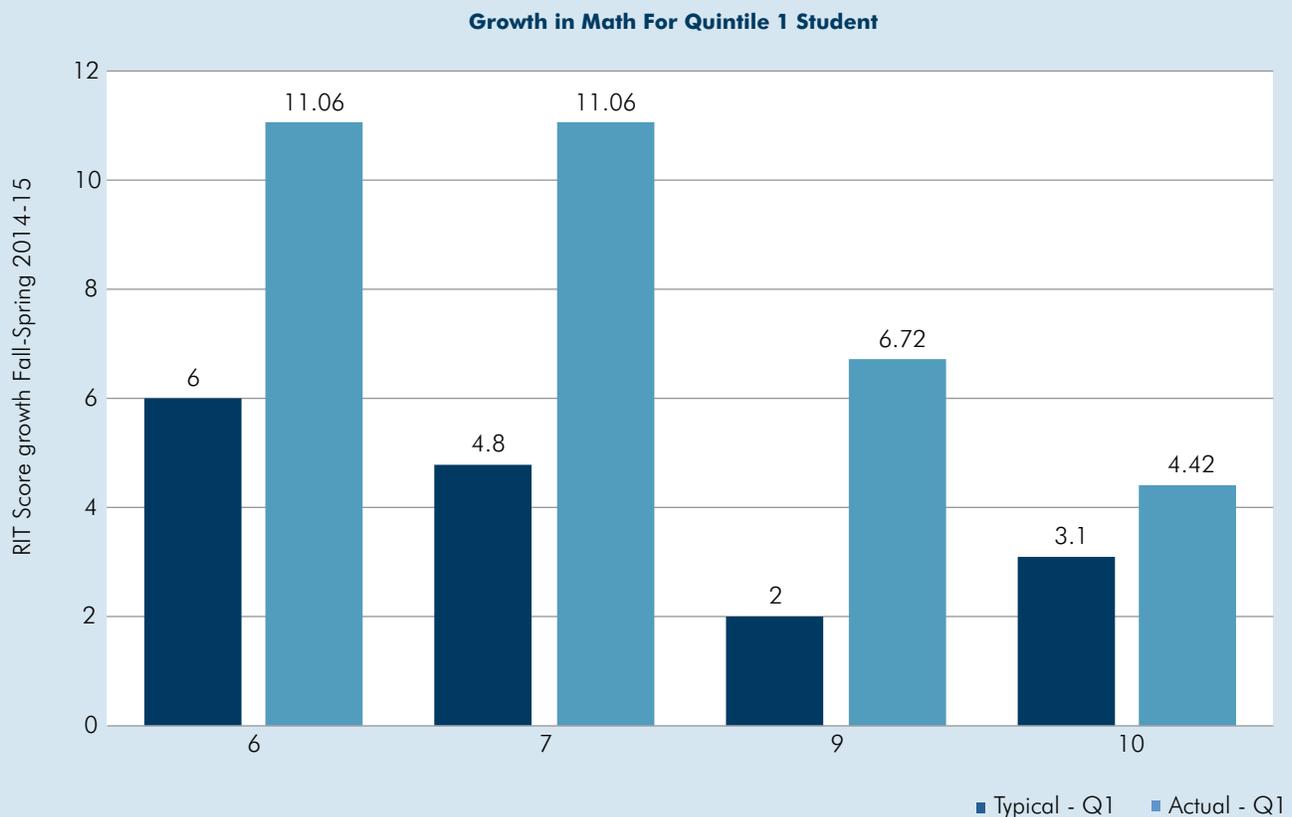
of students pass at least one Advanced Placement exam; at Summit, 57 percent do.¹⁷

NWEA MAP tests show continued strength, particularly for students who enter Summit behind grade level, as the graphs illustrate. Last year those who began the year with scores in the bottom 20 percent had the most rapid growth, more than doubling average national gains for low scorers in math and coming close to doubling them in reading. According to Tavenner, those gains put students on a trajectory that will have them college ready by the time they graduate.

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 (ELA) and literacy standards in the state, 63 percent of Summit students did.

But math and ELA test scores capture only a small part of Summit's success. By 2015, 93 percent of Summit's entering freshmen graduated, about 10 percentage points higher than comparable school districts.¹⁸ Last spring 99 percent of Summit graduates were admitted to four-year colleges, and

FIGURE 5: 2014-15 NWEA MAP—LOWEST PERFORMING STUDENTS IN FALL HAD STRONGEST GROWTH OVER YEAR



Source: Summit Public Schools

in San Jose, where seniors had experienced the personalized model for all four years, 100 percent were admitted to four-year colleges.¹⁹

Parent surveys reveal that 94 percent of Summit parents believe their children are acquiring the knowledge and skills needed to succeed in college and career, through the personalized model.²⁰ But the real test, of course, will be whether the percentage of graduates who finish college begins to move up in three or four years.

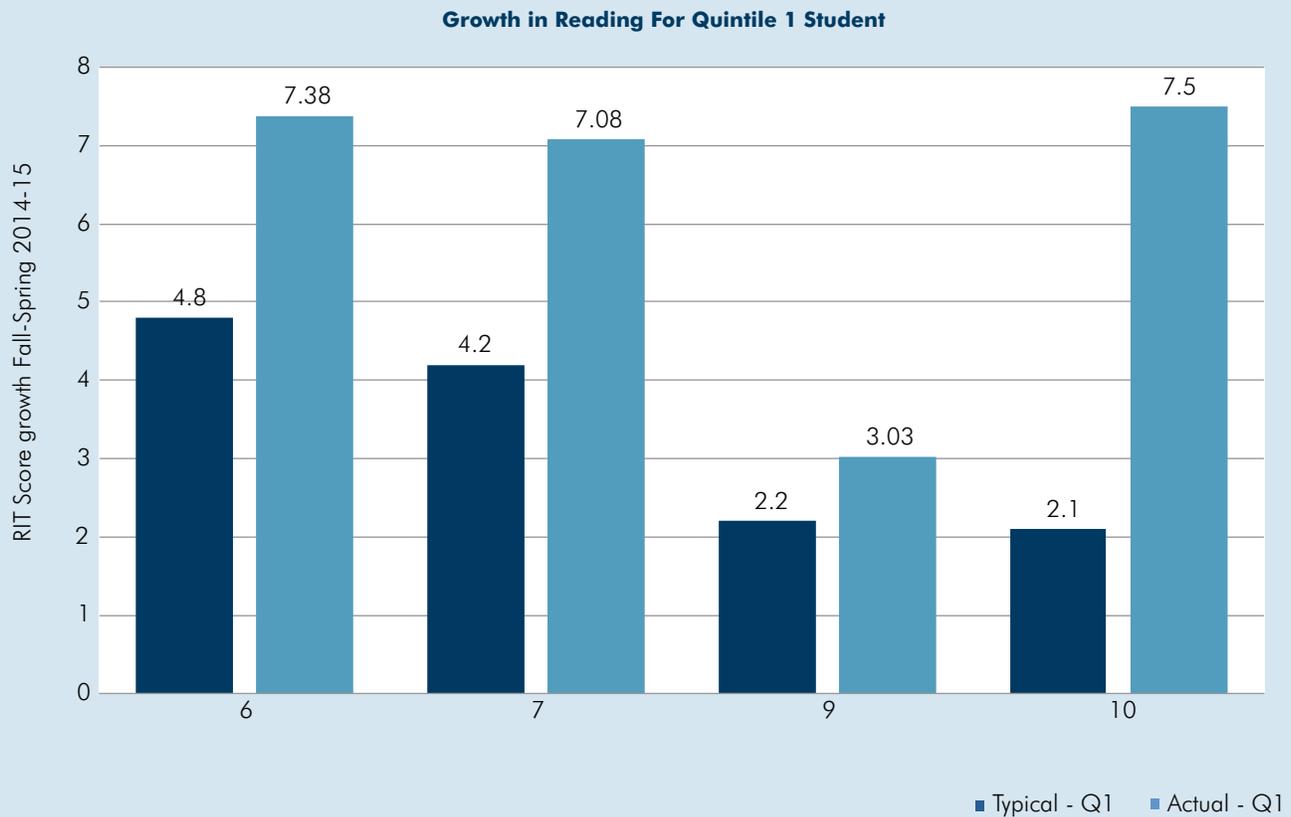
THE FUTURE

In the world of blended learning, Summit is known to be on the cutting edge. Traditional schools also use educational software, but they rarely have the freedom to reinvent their entire educational process.

“Despite all this activity [in traditional public schools], the charter schools pioneering blended learning get far more attention for their innovations,” writes Michael Horn, co-author of *Blended: Using Disruptive Innovation to Improve Schools*. “There seem to be two reasons. First, the charter schools that garner attention for blended learning have, in many cases, used it to transform their entire schooling model.” In contrast, many district schools use it “at the fringe,” without changing their schedules or dominant learning methods.

“Second, the charter schools using blended learning ... have produced impressive student outcomes that are concrete and objective. Those clear and measurable results have been missing from many of the district schools adopting blended learning.”²¹

FIGURE 6: 2014-15 NWEA MAP—LOWEST PERFORMING STUDENTS IN FALL HAD STRONGEST GROWTH OVER YEAR



Source: Summit Public Schools

The Summit model is not for everyone—no model is. People learn differently and thrive in different environments. In any group of several hundred children, a few will not do well learning on computers, for example. A few students choose to leave Summit schools year after year, just as in any school of choice.

More than 40 percent of Summit's students are low income, but Redwood City and the East Side of San Jose are not inner-city Washington, D.C. or New Orleans. When I asked Diane Tavenner whether she thought her model would work with children living in severe, inner-city poverty, she immediately said yes. Summit has one school where 70 percent qualify for free and reduced-price lunches, she told me, and it worked just as well there as at the other schools.

She suspects it will help with discipline anywhere, because kids who are empowered and engaged are not as disruptive.

We should know soon enough if there are any communities where the Summit model won't work, because it is spreading rapidly. In 2015 Summit launched schools in Seattle and Tacoma, though they've been in legal limbo since the state supreme court ruled charter schools unconstitutional.

Summit's mission statement is twofold: "To prepare a diverse student population for success in a four-year college or university, and to be thoughtful, contributing members of society," and "to have a broader impact on public education in America." To fulfill the second part of that mission, Summit makes

all of its work—including the Personalized Learning Platform—available for free to all comers. It also holds multiple-day briefing sessions every summer for interested educators, from both school districts and charters.

Achievement First, a successful CMO with 32 schools in Connecticut and New York, launched a redesign modeled in part on Summit's work. Over the next five years, Tavenner says, Summit wants “hundreds of early adopters,” to create “proof points across a myriad of contexts”—rather than just one island of success.²²

So last year Summit created what it calls “Basecamp,” through which 19 schools—two thirds of them

traditional public schools, some of them high-poverty, inner-city schools—are adopting Summit's methods. They get two weeks of training in Redwood City, help from Facebook's engineers, and mentors from Summit who spend one week per quarter on site. Last October Summit launched the application process for a second cohort of Basecamp partner schools.

“It's tough to make predictions,” Yogi Berra once said, “especially about the future.” But almost two years after I visited my first Summit school, I'm even more convinced that I'm seeing the future.

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Editor's Note

This is the first in a series of reports on “schools of the future:” innovative public schools that reinvent the educational process to heighten student learning. At the Progressive Policy Institute, we believe the country needs a new, 21st century governance framework for public education, one that will produce a variety of new models, to meet the needs of our wide variety of students, then replicate those that succeed and close those that fail. Over the coming years, PPI’s Project on Reinventing America’s Schools will report on a number of breakthrough models.

The Progressive Policy Institute is an independent, innovative, and high-impact DC-based think tank founded in 1989. As the original “idea mill” for President Bill Clinton’s New Democrats, PPI has a long legacy of promoting break-the-mold ideas aimed at economic growth, national security, and modern, performance-based government. Today, PPI’s unique mix of political realism and policy innovation continues to make it a leading source of pragmatic and creative ideas.



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