

Math Reform for Equity

Case Study and Note-Taker for Case Analysis



**Developed by the
Collaborative on
Political
Leadership in the
Superintendency**

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Math Reform for Equity

Case Study



On a hot afternoon in early June, Curtis Johnson welcomed the group of math teachers representing most of the district's six middle schools and three high schools. Everyone took a seat at the round table in the Superintendent's office and passed around a pitcher of ice water. Toby Young, Seneca High School's math department chair, had requested the meeting a couple of weeks ago. Toby and others had spoken at the last School Board meeting about the problem of inequality in math performance across racial groups and how the system of tracking classes contributed to it. Curtis knew a group of math teachers had been meeting to discuss the problem and was eager to hear what they had to say.

Toby started the conversation: "Superintendent, thank you for taking the time to meet with us this afternoon. As you know, some of us have been very concerned about math education here in Mountainview. Not only are math test scores down, but the achievement gap is made worse by over-representation of students of color in lower-level math classes. We know this is a longstanding problem in schools across the country. Researchers have shown that tracking is a form of institutional racism."

Curtis nodded: "I'm concerned too. Math education needs to be a big part of our equity work. I know that tracking segregates our students and perpetuates unequal outcomes. Tell me more about what you're thinking."

Mountainview High School's math department chair, Lisa Gray, cut to the chase: "After many conversations, we believe that de-tracking math classes - in both middle and high school - is the solution. It's been recommended by the NCTM - National Council for Teachers of Mathematics - and by math ed researchers. Heterogeneous classes would require teachers to learn how to differentiate and address students' needs. Students would engage in cooperative learning. Their identity as math learners would shift."

A few others chimed in about the plethora of research findings showing the negative impacts of tracking and cited a few school districts around the country that had de-tracked classes successfully.

Curtis replied: "This is serious reform you're proposing. I do applaud your commitment to our students. It would take a lot of thoughtful work and a lot of resources to pull off successfully. We'd have to demonstrate effectiveness. And we have to realize there will be pushback, especially from parents with kids in the honors classes."



Lisa replied, “Yes, we’ve been talking about that. We actually believe that heterogeneous classes would be beneficial for honors students. We’re genuinely concerned about them, too, because they’re not well prepared for the advanced classes in high school. They’re getting A’s in middle school, but the advanced classes are stressing them out. Some are getting tutoring and working on math for several hours every night. We need to slow down and develop stronger skills while they’re in middle school.”

After continuing the dialogue for another 15 minutes, Curtis brought the meeting to a close, “Let’s start thinking systematically about the why’s, the how’s, and the challenges. You know my M.O. is to not rush into things. We need to collect more data on what is currently happening here in Mountainview. I’d like more information about the districts where this has been successful - and not successful. We need to learn from others’ experiences. Send me a written proposal when you’re ready and I’ll read it carefully with Joan Hewitt, our new Director of Teaching and Learning. Then we’ll meet to talk more.”

Curtis drove across town to his next appointment feeling simultaneously energized and cautious. That night he wrote a long entry in his journal, reflecting on whether this was a good time to take on such an important and challenging project.

Curtis had come to Mountainview as a new Superintendent five years ago. It was a big adjustment, moving to a new region of the country with his young family, learning such a demanding new role, and working in a district with a unique demographic mix. The student population was about 55% White, 15% Black, 10% Latino, 15% Asian/Pacific Islander, and 5% Multiracial. Approximately 30% of students received Free or Reduced Lunch, many of them from rural communities surrounding Mountainview. The disparity between affluent and poor was quite wide. Additionally, the city was home to a major research university.

Given its college town identity, Mountainview’s politics were mostly progressive, but there was a surprisingly wide range of views held by parents and community members, especially around racial and social class equity. The district was small, which made it easier to run, but expectations for excellent - even elite - education in the public schools, especially among college faculty parents, were high.

As a Black child and man, Curtis had learned to navigate racism in the public schools. He knew intimately the problems of disproportionate discipline, placement in lower track classes and special education, and discrimination in the classroom. And he had seen the tragic consequences among family members and friends who didn’t make it through school. These personal experiences had driven him to become an educator who would make a difference for students belonging to traditionally marginalized groups. Overcoming



many obstacles, he had graduated high school, earned multiple advanced degrees, and risen in the ranks from teacher to superintendent.

With his deep knowledge, skills, and commitments, and a willingness to take risks, Curtis's professional dreams had come true. He was widely recognized as a servant leader with great potential for making significant strides in educational equity. He had recently created a new school discipline policy to address the problem of disproportionate suspension and expulsion of Black and Brown kids and those in special education. He had developed capacity around restorative practices and culturally responsive teaching. Staff and admin were now engaged in study groups focused on anti-oppression education models and approaches.

With so much that was going well, was taking on a high stakes reform effort in math education worth the risk? What if test scores didn't go up, and instead, went down? What if resistance from vocal stakeholders turned the effort into a political hot mess? And, what if all of this led to being personally attacked and losing his job?

Ten days later, Curtis received a written proposal and the additional information he'd requested. He learned about de-tracking efforts in San Francisco, Evanston Township in Illinois, Cambridge, Massachusetts, and Long Island, New York. While eager to move ahead, this information convinced him that Mountainview needed to proceed slowly and that Algebra would remain an option in 8th grade. Teachers would need ongoing, high quality, and targeted professional learning experiences. And stakeholders would need to be educated about what the reform was all about, why it was needed, and how it would benefit every child. It would also require significantly more time spent with School Board members to ensure they would be supportive and capable of advocating for this change.

After many meetings over the summer and in-depth professional development for teachers the following year, the first stage of de-tracking was rolled out at Creekside Middle School. Students would be in heterogeneous classes, or in Algebra 1 if they passed the required test. A crucial part of the plan that first year was holding a series of community meetings to educate stakeholders. Curtis remembered a particular meeting as both sobering and frustrating.

The Creekside Middle School library was packed that evening. Curtis and Joan Hewitt were, as usual, co-presenting and facilitating. They explained the skewing of student demographics in math classes, showing data from Mountainview, and cited the recent NCTM report and recommendations for de-tracking. The presentation included a description of how heterogeneous classes were organized and taught. As soon as they finished, several hands went up. A college faculty member with a child at Creekside was



the first to stand up and speak: “This math reform will undoubtedly lower standards for our kids. They need academic rigor so they can be prepared for college. My older son took the math honors classes in middle school and then AP classes in high school. He thrived and now he’s studying at MIT. My younger daughter deserves the same opportunity! Are you going to sacrifice her future for the sake of so-called ‘equity?’”

Curtis assured everyone that academic rigor for all students was a priority. But another vocal parent stood up next: “Let’s be real - kids have different abilities. It’s too bad that some groups are over-represented in the lower tracks. But putting them all together in the same classes means that the kids at the top will be bored out of their minds and will be held back from performing at the highest levels. With tracked classes, the top math kids will achieve great things, not just for themselves, but for society. We need more STEM graduates, not fewer.”

Next a Creekside mom took the floor, raising her voice: “This reform is ideological. No matter what race they are, students who underachieve in math need to be in classes with other students like themselves so they get the right support. Some students are just not math people.”

Curtis’s heart sank as he listened to one comment after another and observed others nodding in the audience. No one countered any of the claims people made. The meeting made him realize how much work was needed to change people’s mindsets.

At the next meeting, he was ready. The first person to comment said, “These mixed classes are not delivering a high-level curriculum. The standards are being dumbed down.” Curtis replied, “Thank you for your engagement. I understand that you’re struggling with how we’re implementing the math standards. I assure you that teachers are still following the same math curriculum.” The second person complained, “My child’s strengths are not being recognized, just because he’s White. That’s not justice. You’re not taking into consideration what’s good for the high achieving math students.” “Curtis responded, “I know you’re afraid that your child won’t be seen and that you feel your concerns aren’t being heard. I think you’ll see over time that the changes will actually benefit him.” He clarified the policy, assuring parents that Algebra 1 would remain a mainstay in 8th grade. He cited the NCTM and math education scholars. And he framed the reform as a teacher-led initiative to benefit all students. At the same time, he validated people’s feelings, focusing on educating people versus fighting them.

Curtis made a commitment to parents that he would regularly send out updates on the process of reform, improvements needed, and progress made. These would include information about the curriculum being taught, methods teachers were using, and



assessments of student learning. In this way, he promised transparency and invited parents to get involved in a collaborative learning endeavor.

Over the next few years, the district chose to prioritize math as its primary instructional focus. All four middle schools de-tracked their math classes in grades six, seven, and eight. To make heterogeneous classes work well, classes were capped at 24 students and a special education teacher was assigned to each class, to co-teach with the regular math teacher. All math teachers, K-12, were involved in professional development. The middle school teachers received instructional coaching. As they learned how to group students in different ways, adjust the curriculum to students' progress, and provide extra help to those who needed it, achievement rose across all groups. Teachers and school leaders were excited by the results. But changing minds proved to be much more challenging.

First the public comments at School Board meetings filled up with emotionally charged criticisms. Curtis was blamed for bringing down what had been known as an excellent school district. He was accused of imposing an agenda of racial equity because he was Black. There were nasty comments on news articles about failing schools. The worst were threatening texts and voicemails, some people using racial epithets. Curtis worried about protecting his family from harm.

Curtis leaned into the work with the community, parents, and School Board. He invited people to talk with teachers and students so they could communicate rationally with information instead of emotion. He encouraged the President of the PTA to do a book study with Carol Burris's *Detracking for Excellence and Equity*. When confronted with claims that de-tracking was a DEI reform for Black and Brown kids, he continually reminded people that it benefited White kids too. To disrupt deficit mindsets, he demonstrated his commitment to an ongoing learning conversation about all students' capabilities.

A big blow came with the next School Board election. Three of the five seats were flipped. The new members were vocal critics of de-tracking. Curtis went from spending about 25 to 35 hours a week meeting with the whole group, smaller groups, and individuals on the Board. He had worked so hard to develop everyone's understanding and support. He continued the site visits, reviewing of data, and informational talks with math experts he had started a few years back. But the new members advocated for "back to basics," "re-tracking," and traditional forms of discipline.

In contrast with positive outcomes of de-tracking and other policy changes in Mountainview, Curtis felt the discourse around education hardening. In meetings, there was an Us vs. Them atmosphere with people having a harder and harder time listening to



different views. Stakeholders on different sides were creating alliances and demonizing others. It became apparent that the district was being targeted by outside agitators waging war on progressive education. The conflict sharpened as the next vote on the school budget approached. De-tracking was a costly initiative, due to the co-teaching, professional development, and tutoring for struggling students - all of which were crucial for success. A couple of new board members wanted to use district funds to do other things.

Curtis was determined to stay the course. He was thrilled by the changes the district had instituted, the mix of students in math classes, the middle school teachers' stories about student engagement and growth, the improved test scores, the high school teachers' reports on students' improved math skills. The district was recognized by the College Board. Curtis felt blessed to see the fruits of his labor.

But the resistance was tough to deal with, especially the threatening messages and voicemails. His love and faith in humanity was tested. Curtis tried to focus on the joy in his personal life. His disciplined approach to taking care of his mental and physical health - eating well, working out, seeking counsel with mentors and trusted colleagues, journaling, and spending time with loved ones - kept him going. But when the new school budget did not pass, he was thrown into a quandary.

The plan was to start de-tracking ninth grade math classes. Could he continue scaling up a math initiative he hoped would be a model for the country while balancing a budget that had been significantly cut? And along with the heavy professional lifting, could he ensure well-being for his family and himself?

Note: This case was written by Judy Pace, April 8, 2025. It is a fictionalized case based on real events. All names of people, places, and organizations are pseudonyms.

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Visioning

What does the leader do to create a compelling vision for success?

Communicating

What does the leader do to communicate about the vision and strategy?

Political Mapping

What does the leader do to understand who is for, against, and why?

Mobilizing

What does the leader do to mobilize support? And what kind of support?

Relationship Building

What does the leader do to build trusting relationships across lines of difference?
