



N.Y. / REGION

# Algebra Scores Prompt Second Look at Revamped Regents Exams

By **KATE TAYLOR** NOV. 30, 2015

Here is the thorny math problem facing New York State education officials: If the percentage of students passing the Algebra I exam falls to 63 percent from 72 percent, and the passing grade is scheduled to increase by 9 points in coming years, should the test be made easier?

In 2013, concerned that high school graduates were not prepared for college, the State Board of Regents revamped the exams students must pass to graduate, starting with the English and Algebra I tests. The board decided that, where previously students needed a score of only 65 on a 100-point scale to pass, in coming years they would have to score at a “college- and career-ready” level, which this year was deemed to be a 79 in English, and a 74 in Algebra.

The result: On the 2015 Algebra I exam, which was supposed to align with the new Common Core curriculum, the percentage of students passing fell to 63 percent, down nine points from the old exam last year. And less than a quarter of students scored at the college-ready level. In New York City, which

has a concentration of poor and minority students, only 52 percent of students passed the 2015 exam, down from 65 percent the previous year on the old exam. Just 16 percent reached the “college-ready” level.

Confronted with the consequences of higher standards, the Regents, like education officials across the country, are now rethinking them.

This fall, they established a committee to study the results on the new exams to determine, among other things, whether the bar for passing, which students would have to meet starting in 2022, had been set too high. (They had originally said the class of 2017 would need the higher scores to pass, but last year decided to push that back.)

MaryEllen Elia, the state education commissioner, said no decision had been made. “Does it look reasonable right now?” she said of the “college-ready” standard. “I would say, no, it doesn’t. And I would say, what we have to do is we have to keep our eye on that.”

Passing the old algebra Regents was already a struggle for many students. An analysis by the Center for New York City Affairs at the New School found that, among students who entered city high schools in 2010, three in 10 failed the exam on their first try. Students who failed the first time had to retake it an average of twice more to graduate. To help those students, schools had to devote more resources to teaching remedial algebra, rather than other, higher level math courses.

Before the new exam was given, the Regents had said they intended to set the grading so the same number of students passed as had before, but that did not happen.

Mark Dunetz, the vice president for school support at New Visions for Public Schools, an organization that supports a large network of high schools, said that while the algebra exam alone did not keep many students from graduating, many students ended up taking the exam five, six or seven times.

“It’s hard to quantify the impact of something like that,” he said.

To get students over the new, even higher threshold, New York City would need a “Marshall Plan” for teaching math, said Kim Nauer, the education project director at the Center for New York City Affairs. She noted that only 41 percent of this year’s sixth graders — the first who will be required to reach the new standard — scored at grade level on math tests in the spring.

“You don’t have much time left to get them to a point where they can pass algebra and graduate,” Ms. Nauer said.

The city’s Education Department is “in a panic about this,” said Uri Treisman, a professor of mathematics at the University of Texas who has advised the department on plans to improve math instruction in middle and high school.

Among the ideas the city is considering: having fifth graders take math with a specialized instructor instead of one teacher for all subjects; teaming up with local universities to get more sixth- and seventh-grade math teachers certified in math instruction; creating summer programs for middle- and high-school students who are struggling in math; and training middle-school and algebra teachers in how to address students’ “math anxiety.”

Mayor Bill de Blasio, a Democrat, also recently pledged that by 2022, all students would have access to algebra in eighth grade, and all students would complete algebra by the end of ninth grade.

The investment required is clear at Park East High School in Manhattan, where most students come in doing math below grade level, but where 91 percent of students who took the Algebra I Regents this year passed it.

Freshmen have two periods of algebra each day. Each class has two teachers: While one leads the main class, another pulls out small groups of students who need more individual attention.

The head of the math department, Lauren Brady, could not find a curriculum that she felt fully aligned with the Common Core standards, so she and the other two teachers wrote their own.

But to devote so much time to algebra, ninth graders are no longer taking art, music and health. Now Ms. Brady and the other teachers are trying to pare the curriculum to give the students more time for other subjects.

And some people wonder if it is all worth it.

Algebra is a stumbling block not only for high school students, but also for students in community colleges, many of whom founder in algebra-based remedial courses. Public colleges hoping to increase their graduation rates have been asking whether algebra should be the default math course. The Carnegie Foundation for the Advancement of Teaching, working with Dr. Treisman, has created courses in statistics and quantitative reasoning that are meant to be both more engaging and more practical for many students than college-level algebra. Close to 50 community colleges now offer the courses.

In “The Math Myth: And Other Stem Delusions,” to be published by the New Press in March, Andrew Hacker, an emeritus professor of political science at Queens College, argues that it is wrongheaded to force all students to study algebra.

But Dr. Treisman said that allowing students to graduate from high school without taking algebra “would dramatically reduce their options.” And he said there was value in making students pass an algebra exam to graduate, as well.

“There’s a very solid research base for at that level having external accountability for course quality,” he said. In states that have not had such accountability, he said, “ethnographic studies of algebra, particularly in low income schools, showed that almost no algebra was being taught.”

***Correction: December 5, 2015***

Because of an editing error, an article on Tuesday about efforts by state education officials to determine whether the bar for passing the Algebra I Regents exam was set too high misstated the planned increase in the passing grade for the test. It is scheduled to go up by 9 points, not 14 points.

*Follow The New York Times's Metro coverage on Facebook and Twitter, and sign up for the New York Today newsletter.*

A version of this article appears in print on December 1, 2015, on page A22 of the New York edition with the headline: Algebra Scores Spur Regents to Reconsider State Exams.