

Changes to Middle School Math in the ICSD

A growing body of evidence supports that tracking students according to their math achievement, which is often measured by standardized tests, has the effect of sorting students by race, class, and gender. Research also indicates that “high ability” students perform equally well in any grouping system but experience the greatest social and emotional benefits from heterogeneous grouping.



In light of these findings, and because of our commitment to inclusion, the Ithaca City School District has decided to make changes to our middle school math programming.

Currently, sixth and seventh grade students are tracked into accelerated and non-accelerated math classes. Next year, the ICSD will begin dismantling this method of tracking. Starting in fall 2019, the ICSD will offer a single sixth grade math course (Math 6) and, starting in fall 2020, will offer a single seventh grade math course (Math 7).

Within the new Math 6 and Math 7 classes, students will be heterogeneously grouped. All of the classes will also be co-taught, and teachers will receive professional training focused on co-teaching with differentiation, flexible grouping, as well as on advanced mathematical concepts.

In eighth grade, every student will then have the option of taking Math 8 or accelerating into Algebra 1. The high school math curriculum will not be affected by these changes in any way.

Middle School Math Offerings

	2018-2019		2019-2020		2020-2021 and on	
6th Grade	Math 6	Accelerated Math 6	Math 6		Math 6	
7th Grade	Math 7	Accelerated Math 7	Math 7	Accelerated Math 7	Math 7	
8th Grade	Math 8 or Expanded Math 8	Algebra 1	Math 8	Algebra 1	Math 8	Algebra 1

Frequently Asked Questions

Q What exactly will be different in the middle school math program?

A Students will no longer be placed into different level math classes starting in sixth grade. Beginning in fall 2019, all sixth grade classes will be heterogeneous and, beginning in fall 2020, all seventh grade classes will be heterogeneous.

Q Why make these changes to middle school mathematics?

A Research, ICSD data, and anecdotal experiences all support a joint position statement from the National Council of Supervisors of Mathematics and TODOS: Mathematics for ALL that argues:

- Tracking students by math achievement has been used to sort students by race, class, and gender;
- tracking institutionalizes a fixed mindset about students and their math capabilities;
- students placed in lower tracks during middle school have less access to rigorous math courses; and
- heterogeneous grouping offers the greatest social and emotional benefits for all students.

Additionally, one of the motivations for these changes is to ensure students have mastery of middle school mathematics content and to enable a more diverse student population to access higher level math courses.

Q Who initiated these changes?

A All changes to middle school programming have been initiated and led by educators currently working in math classrooms across our district. Superintendent Brown, Deputy Superintendent Talcott, other district administrators, and building-level leaders have supported the shifts in detracking courses at Ithaca High School and continue to support similar efforts in math at all three middle schools.

Q What professional development is being offered to support these changes?

A Sixth grade teachers are receiving professional training from teachers who have worked in other states to deliver heterogeneous instruction in middle school. The training focuses on co-teaching with differentiation and advanced math content. Math leaders are also working with the middle schools to align technology tools used to support classroom instruction.

Q Will students in the middle school still be able to take Algebra 1 in eighth grade?

A Absolutely! The ICSD will continue to offer Algebra I in 8th grade. We have heard concerns shared by caregivers regarding how students will learn 8th grade content in middle school. We are currently designing clear pathways to this end, with implementation in the 2020-2021 school year. The ICSD will share these pathways with the community during the 2019-2020 school year.

Q Will “double acceleration” in math still be possible?

A Yes, we will continue to offer the “double acceleration” test. All fifth grade students will have the option of taking the test to determine whether they qualify for placement in advanced math classes. Typically, “double accelerated” students take Algebra 1 in seventh grade. In the Spring of 2020 and moving forward, this will simply be called an “accelerated” test, given the new structure.

Q Are there any anticipated changes to the high school math program?

A The high school math program will be enhanced by these changes. The high school Math Department is in full support of these changes, having experienced increased levels of success for all students after detracking Algebra 1 and witnessing the successful detracking of biology, Global History, and English.

Q Will students still be able to take AP Calculus?

A Any student who takes Algebra 1 in eighth grade will be on the path to take AP Calculus AB or AP Calculus BC. Those who don't accelerate to Algebra 1 in eighth grade but wish to take AP Calculus may do so by doubling up on math classes during their sophomore year.

Q What other high level math courses are available to students regardless of acceleration?

A Ithaca High School offers Introduction to Statistics, AP Statistics, Programming 1 and 2, and AP Computer Science, as well as a Mathematics of Robotics elective.