

Proposed Mathematics Pathways



Board of Education Presentation
April 14, 2015

Current Pathways

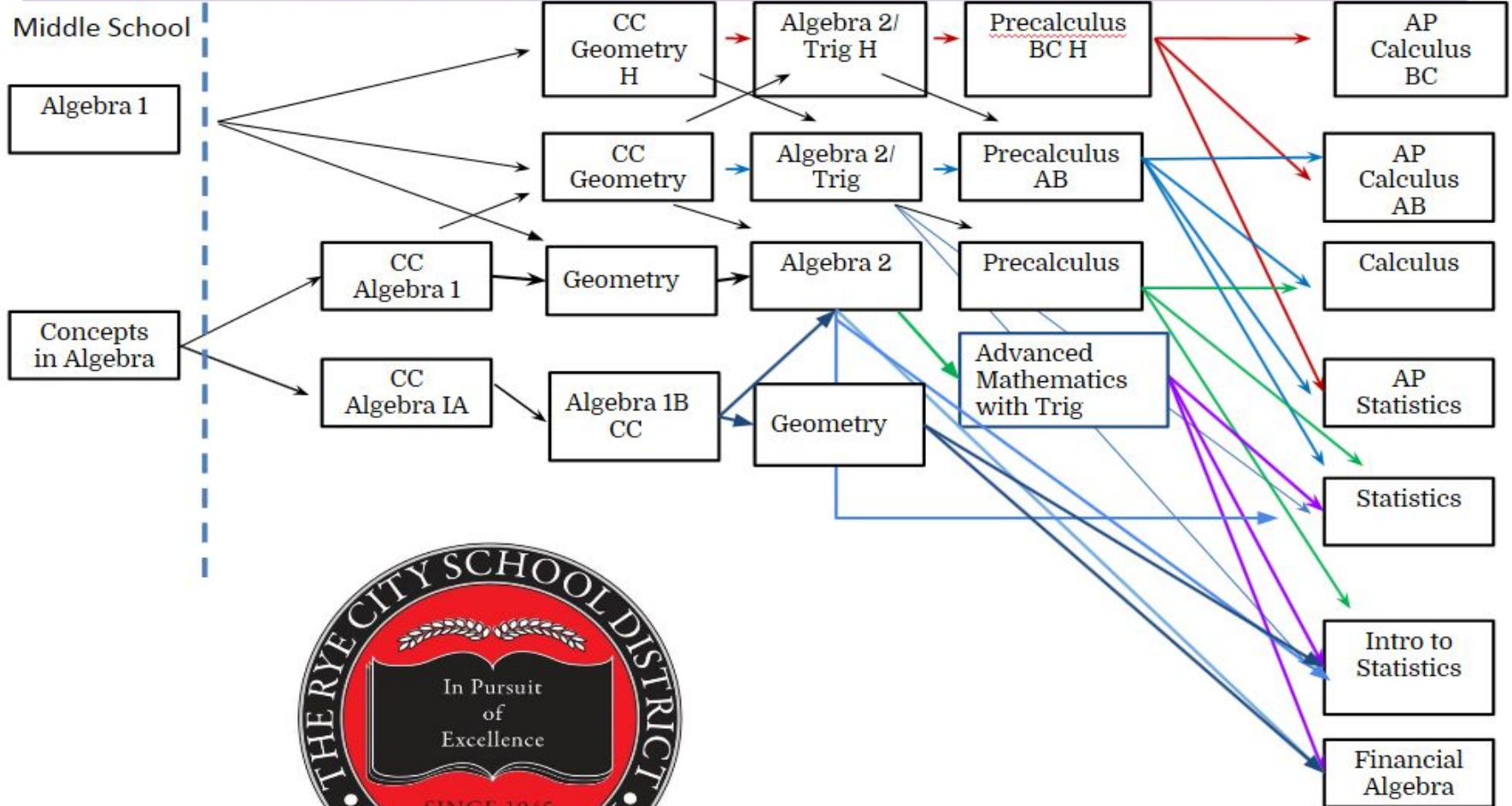


- **8th Grade: Common Core Algebra 1 & CC 8th Grade Math**
 - CC Algebra 1 Regents
 - NYS CC 8th Grade Exam
- **9th Grade: Geometry**
- **10th Grade: Algebra 2/Trigonometry**
- **11th&12th Grade: PreCalculus, Calculus, Statistics, AP Calculus AB & BC, AP Statistics**

Current Pathways



Pathways for Mathematics at Rye High School for Entering *Freshmen* 2015-2016



Concerns



- **Common Core Alignment:
Algebra 1 vs. 8th Grade Mathematics**
- **Pursuing Geometry after the Algebra 1 Course
interrupts momentum in algebraic work**
- **With the current trajectory, we find students struggle
upon entering Algebra 2/Trigonometry**
 - Valuable time is lost due to the need to review

What Do We Propose?



- **Simply moving the Algebra 2/Trigonometry course to follow Algebra 1 is not the solution to this problem**
- **Students would still experience the loss of algebraic momentum, affecting the subsequent Pre-Calculus course**

Therefore, we propose to reorganize the pathways of the math courses at Rye High School

What Do We Propose?



Algebra 1 & 2 will combine into a 2 year Algebra sequence

- **Common Core Algebra 1 & Non-Trigonometric topics from Algebra 2**
- **Topics will be realigned**
- **Moves away from the, “Mile wide & inch deep” philosophy**
- **Fosters a deeper algebraic understanding**
- **Common Core Algebra 1 Regents at the end of Algebra 2***

* It is important to note that by reorganizing the curriculum to go deeper into fewer topics each year, not all of the Common Core Algebra 1 topics will be taught in the first year, thus students will not be prepared to take the Common Core Algebra 1 Regents Examination until the second year.

What Do We Propose?



Geometry & Trigonometry will merge into one course

- **Will include a study of proofs, integrated with algebraic exercises that demonstrate key concepts**
- **The trigonometry portion of the course will come from the Common Core Algebra 2 standards and prepare students with the skills necessary for PreCalculus**
- **Trigonometry is the study of triangles (logical grouping with Geometry)**

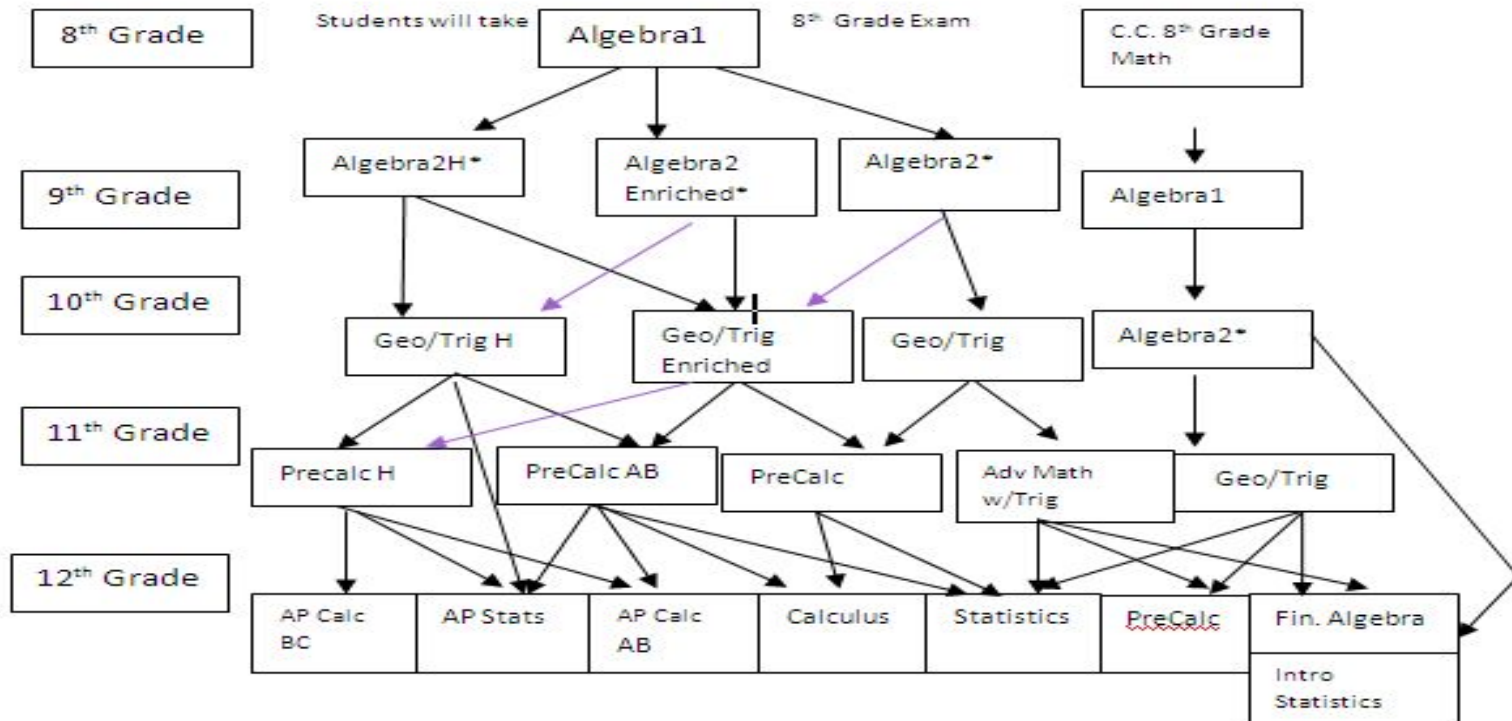
What Do We Propose?



By the end of three years:

- **Students will still have completed the entire Common Core Algebra 1, Geometry, and Algebra 2 standards**
- **The courses are simply being reorganized to maximize learning**

Proposed Pathways



*Students will take Common Core Algebra Regents at the end of Algebra 2.

Indicates movement is possible

Why Change the Math Pathways?



We strongly believe the new pathways will:

- **Build a stronger mathematical foundation with a deeper mathematical understanding**
- **Enable more students to be prepared to take a Pre-Calculus course, followed by a Calculus course, as well as various levels of Statistics****
- **Support the new SAT's**

****This will allow us to attain our goal of ensuring more students achieve at higher levels within our program**

Why Change the Math Pathways?



Dr. Jaime Zung -