D97 Math Commitment to Math Excellence

January 14, 2024

Board of Education

Algebra is the foundation for all math to come.

The better the foundation, the more successful the student will be.

If our students take their time learning these foundational skills, advanced math will not only be available, but a worthwhile experience increasing the student's **love for math**.

Pre 2017

based on 2nd grade CoGat scores

Students → Math Course

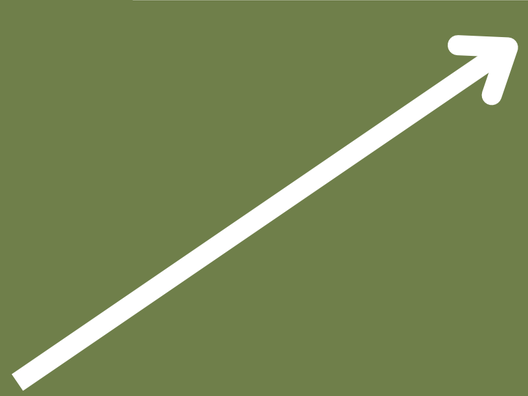
2019

D97 Equity Policy Implemented

2020 Implementation

Illinois Learning Standards for Math

(i.e. what students need to be able to know and do at each grade level)



Students

Math Course

Timeline of Key Math Initiatives at D97

pre 2017

"Walk up" Reading and Math determined in part by Grade 2 CoGat scores

Offered Bridge and Review courses to rising 6th-8th grade students for 2.5-3 weeks during the summer only

2017

Gifted, Talented, and Differentiation (GTD) ad hoc committee formed to address likely inequities in D97 acceleration practices
-->
"Enrichment for all"

GTD Teachers --> Enrichment Specialists

2019

D97 Equity Policy implemented

State Acceleration Law enacted
and D97 current acceleration practices established

Every student continues to have access to Enrichment Specialist

Timeline of Key Math Initiatives at D97

2020

Revamped the Summer Math Enrichment Program for 2021

2021

Revised Bridge end-of-course exams

2022

Added Trimester 3 + summer

Updated MAP criteria

2023

Eliminated the 6th Grade Math Placement Exam

2024

Implemented Appeals Process for bridge End-of-course exam

Expanded MAP criteria to include standard error of measurement

What are the key components of our approach to standards-based instruction in D97?

Our Commitment to Math Excellence

We are committed to giving students **access to the appropriate math courses** throughout their academic experience.

We are committed to providing **high-quality standard based-instruction** to all students.

We are committed to listening to **feedback** from all key stakeholders to continue to **evolve our programs**.

We are committed to ensuring that all our students are **properly prepared for high school and beyond**.

We are committed to **prioritizing student voice** in decisions that impact their math journey

What research and/or stakeholder feedback is guiding our approach?

What We've Heard...

D97 staff concerns about subsequent math course performance and students need to engaging in math experience

Family concerns about student progress in advanced math courses

OPRF concerns about accelerated students missing foundational math skills.

The Rush to Calculus

Joseph G. Rosenstein, Rutgers University

This article reports on the extent to which students continued their high school math acceleration in their first year at Rutgers, on the basis of a study of their high school and college transcripts. (Hint: Not too many did.)

Introduction

During recent years, the number of students taking calculus in high school has increased dramatically. Indeed, the number of students taking AP Calculus in high school is now slightly greater than the number of students taking first-semester calculus

Mathematics Learning: A Journey, Not a Sprint

By Matthew Larson posted 12-20-2017 09:25

17 Like

One of the questions I am frequently asked goes something like this: "What do you think about acceleration?" The question is often asked in the context of teachers working with parents who want their child to skip grade level work or entire courses so they can get into the next grade or course more quickly. The parental goal more often than not is to ensure their child can complete calculus in high school. As a school district math curriculum administrator, I faced "acceleration pressure" from parents nearly weekly.

Should we support acceleration? This question, like many questions in mathematics education, does not have a binary answer. The answer is "it depends." Sometimes acceleration is appropriate and sometimes it isn't. What does the answer depend on? Here the answe is clearer: it depends on the student's demonstrated significant *depth of understanding* of all the content that would be skipped. If a student demonstrates significant depth of understanding of some but not all the content that would be skipped, then this is more appropriately an opportunity for enrichment rather than acceleration.

Last fall NCTM released a new position statement titled *Providing Opportunities for Students with Exceptional Mathematical Promise* (recently endorsed by the National Association for Gifted Children) In this position statement NCTM argues that "when considering opportunities for acceleration in mathematics, care must be taken to ensure that opportunities are available to each and every prepared student and that no critical concepts are rushed or skipped, that students have multiple opportunities to investigate topics of interest in depth, and that students continue to take mathematics courses while still in high school and beyond."

At the elementary level, and even into secondary school, **speed completing computational tasks or carrying out routine symbolic**

The Effects of Accelerated Mathematics on Self-Efficacy and Growth Mindset

70 Pages • Posted: 8 Dec 2022

Sharon Bi
Santa Ana Unified School District

Jenny Buontempo
University of Texas at Austin

Richard DiSalvo
New York City Independent Budget Office

Date Written: July 9, 2022

Abstract

Student's educational investment decisions are influenced by their beliefs about the returns to study effort and their chances of academic success. This highlights the importance of studying the effects of school policies on students' beliefs about their ability to learn and achieve. To this end, we examine the effects of

What's the difference between state mandated acceleration and access to algebra at D97?

State-Mandated Acceleration

D97 Access to Algebra

(Integrated Math 1)

Two different pathways with two different purposes

State Mandated Acceleration

What is the purpose?	To accelerate passed your age appropriate **grade level** in **any subject** per 2019 Illinois Accelerated Placement Act
Who can participate?	All students in the district are eligible for state mandated single-subject or whole-grade acceleration
How can students participate?	Students, teachers, or families can apply for acceleration during the window (March 1 - April 25)

D97 Access to Algebra Pathway*
(Integrated Math 1)

What is the purpose?

To increase access for students not currently on track for Algebra (Integrated Math 1) by 8th grade.

Who can participate?

Students in grades 5 -7 who are not already single-subject accelerated in math.

How can students participate?

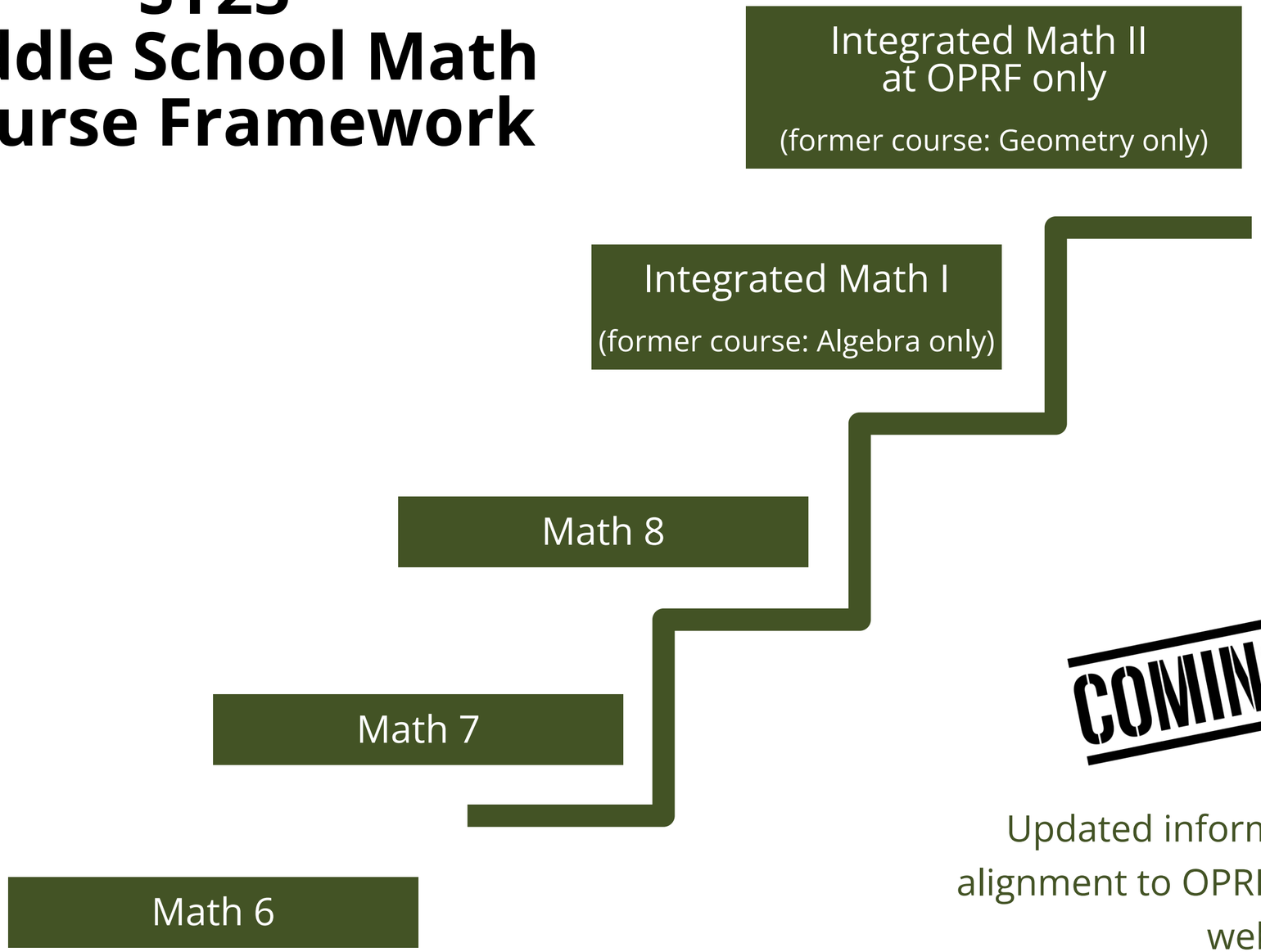
Bridge Course: Students participate in a Trimester 3 and summer course and pass an end of course exam with 80% or higher

MAP: Students can register to take the spring NWEA MAP Math 6+ test and meet their grade level RIT score criteria

***NOTE:** This pathway was formerly refered to as: “Math Enrichment: Advancement”

What is the math course sequence from 6th to 9th grade in D97?

SY25
Middle School Math Course Framework



COMING SOON

Updated information regarding alignment to OPRF will be on the D97 website

How can 8th grade students with different MS math courses access AP Calc when they go to high school?

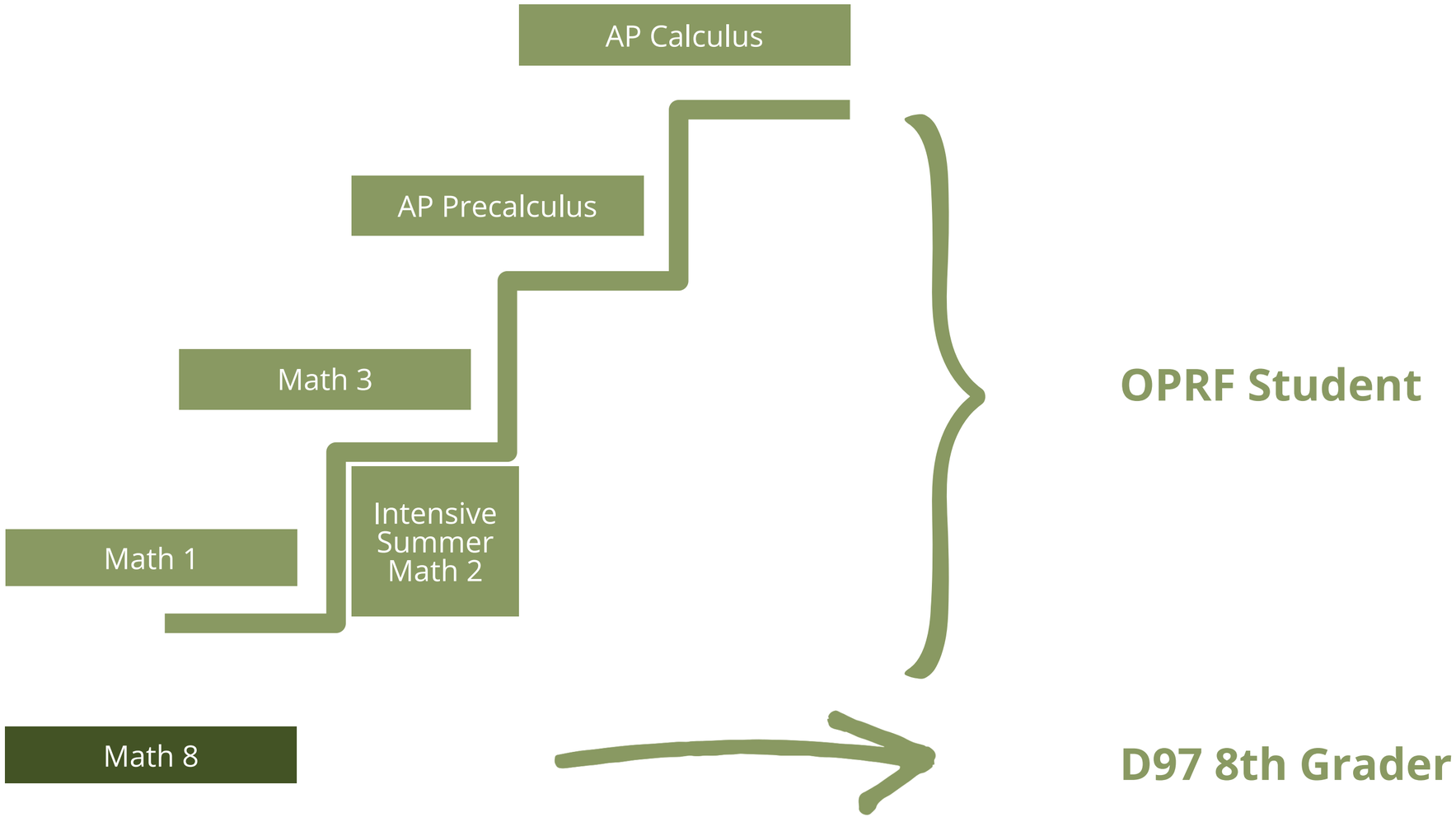
Can a student who has not participated in state-mandated acceleration in middle school still take AP Calc in high school?

From D97 to OPRFHS:
Access to Calculus

ALL students will have the opportunity to take AP Calculus AB/BC as a senior regardless of acceleration or access status.

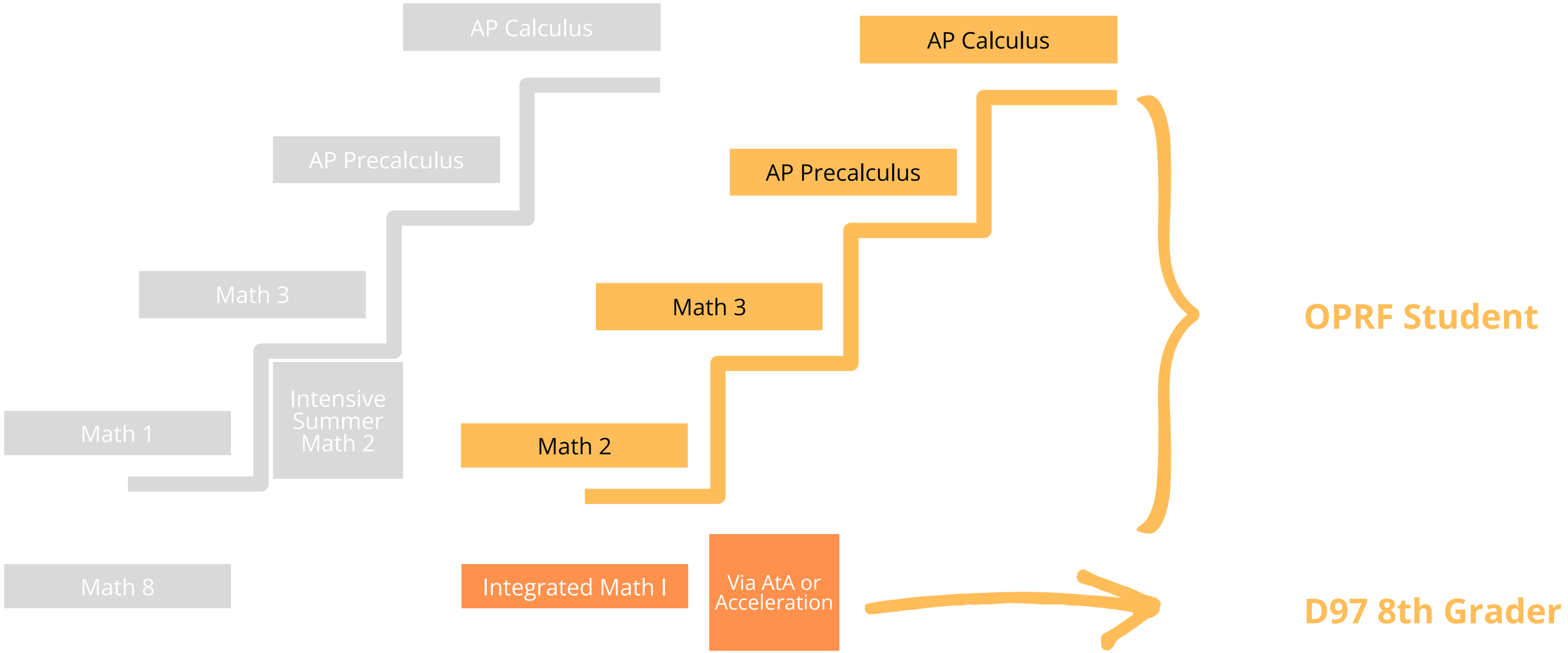
Pathways to Calculus based on 8th grade Math Placement

Profile A:
Student who followed typical trajectory in D97



Pathways to Calculus based on 8th grade Math Placement

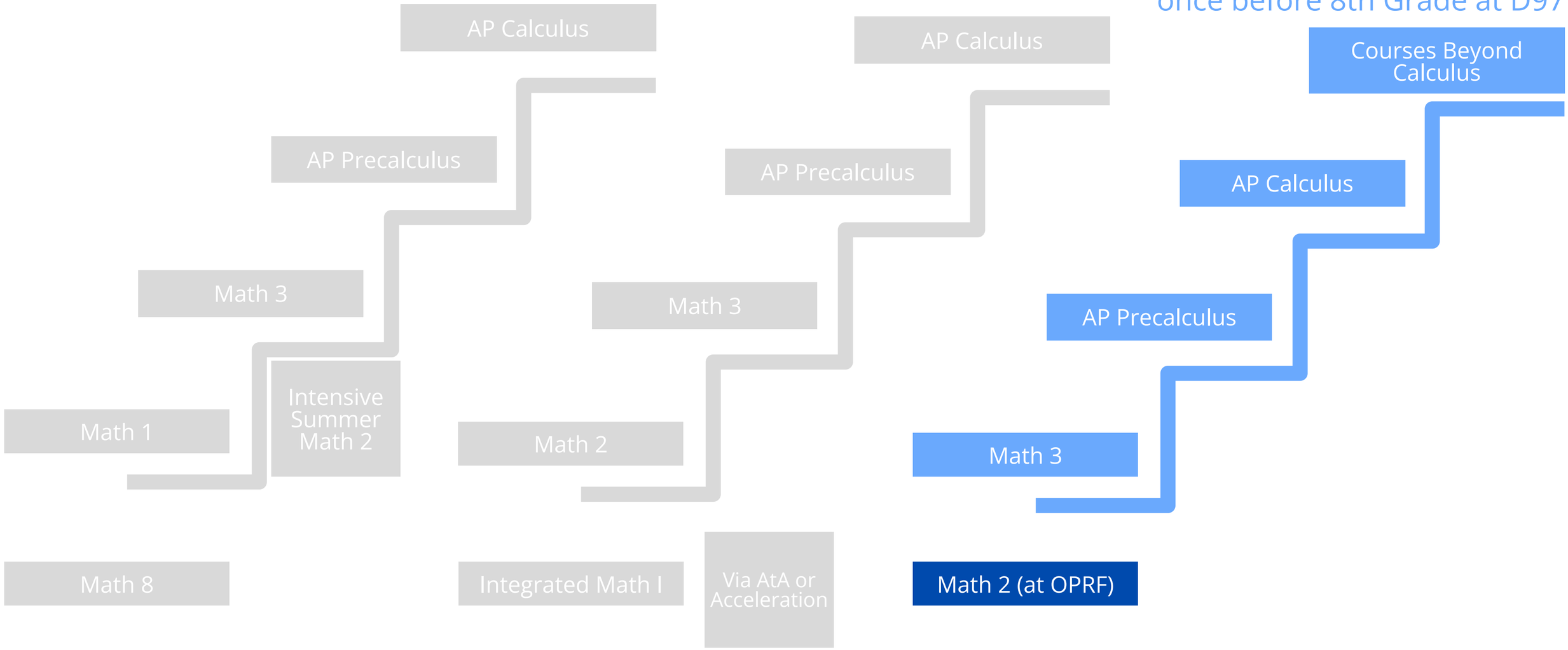
Profile B:
Student who took Integrated Math I by 8th Grade at D97



Pathways to Calculus based on 8th grade Math Placement

Profile C:

Student who advanced and/or accelerated in Math more than once before 8th Grade at D97



What should parents/students do if the learning is not rigorous enough?

WHO DO I CONTACT?

These guidelines are designed to create open and direct communication between students, families and staff. Our goal is for questions and concerns to be addressed quickly and collaboratively, starting at the classroom/school level.

District 97 Staff Directory:
op97.org/about/district-97-directory

Let's Talk: op97.org/about/lets-talk

Let's Talk offers an easy and convenient way to connect directly with D97 administrative staff from any device, in your preferred language. You can also share feedback to help improve our customer service!

Questions/concerns related to your STUDENT:

Examples include classroom policies or lessons, grades, homework, or student behavior.

Contact the teacher: Using the District 97 Staff Directory, start with an email to your student's teacher. The teacher is your first contact to assist with questions or concerns.

If you still have concerns or are seeking a resolution after speaking with the teacher, contact the school administration via Let's Talk to continue the conversation.

Questions/concerns related to your SCHOOL:

Examples include school programs or procedures, student/school safety, and general school-wide questions.

Contact the school's main office for general assistance or inquiries. Use Let's Talk to start the conversation. The school's team will work with you and your family, along with your child's teacher, to address your concerns.

If you still have concerns or are seeking a resolution after speaking with school administration, contact the district administration.

Questions/concerns related to the DISTRICT:

Examples include district programs, policies or procedures, curriculum, registration, facilities, or communication.

Contact District 97's main office for general assistance at (708) 524-3000. You can also send a message via Let's Talk, and a district staff person will get back to you ASAP.

If you are reaching out about a classroom- or school-level concern, please include the names of staff you have spoken to and the dates of the conversations. This will help us all work together toward a resolution for your family.

If you have feedback or questions related to board policy or governance, you may email the D97 Board at d97board@op97.org.

Why are there fewer students currently attending math courses at OPRF than in past years?

As a result of program improvements made in 2017 to ensure students are better prepared for higher levels of math, there was a decline in the number of students projected to be in Geometry. In response to the change in demand, this course is now offered at OPRF only.

*See earlier slides for timeline of program improvements

Thank You!