



LBUSD

Board Presentation

Math Pathways

Progress Monitoring

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Implementing California State Standards requires:

- Changes in instructional practice
- Changes to when topics are taught
- Assessment alignment: CAASPP, EAP, and SAT
- Expansion of definition of rigorous courses

Goals for LBUSD Work...

- Ensure that all students have deep understanding of concepts and can apply them to real world situations
- Design pathways that ensure all students engage in rigorous coursework leading to high levels of math
- Align courses and assessments to CAASPP, Early Assessment Program (EAP), SAT
- Ensure that our students are competitive and college and career ready

Implementation Process...

- Progress/Programs
 - California State Standards implemented at TMS:
 - ◆ 6th Grade – 2013/14
 - ◆ 7th & 8th Grades – 2014/15
 - LBHS implemented Algebra program to bridge gap between 1997 standards and CCSS - 2013/14
 - LBHS Piloted an integrated Environmental Science Program linked to CCSS Algebra - 2014/15

Stakeholder Involvement...

- Two Parent Information Nights regarding math pathways
- Information letter to 5th grade parents with Acceleration Information
- PTA Council Meetings
- Student orientation for incoming 9th graders
- Middle School introduced CCSS Pathways at 6th grade parent orientation night

Stakeholder Involvement...

- Individual parent meetings with Counselors, Principals, and Instructional Services Staff
- School communication with parents through newsletter, weekly info email, etc.
- FAQ posted on website
- Monthly Common Core Math Newsletter at Middle School
- Math Course Information Guides at Middle School
- High School Course Catalog and registration materials

Professional Development...

- OCDE Math/Science Alignment
- Dr. Patrick Callahan – Grades 5 through 12
- PLC Discussions
- Universal Design For Learning and Common Core State Standard Lesson Planning

Pilot Bridge Class – 5th to 6th Grade - Summer 2014 & 2015

- Refined curriculum to align with Common Core State Standards
- Developed a placement test aligned with all CCSS domains, containing multiple question types, including open-ended responses
- Instigated Accelerated Common Core Pathway

Grandfathered Math Pathways

Current Students - Class of 2015 -2019

	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade
Current 9 th Graders	Geometry • 2014-15	Algebra II / Honors • 2015-16 • Un-weighted	Pre-Calculus / Honors • 2016-17 • Un-weighted • Proposed - Weighted	Year 3 Math • 2017-18 • AP Calculus • AP Statistics • Statistics	Year 4 Math • 2018-19 • AP Calculus/Calculus • AP Statistics/Statistics
	Algebra • 2014-15	Geometry • 2015-16	Algebra II / Honors • 2016-17 • Honors Un-weighted	Year 3 Math • 2017-18 • AP Calculus • AP Statistics • Statistics	Year 4 Math • 2018-19 • AP Calculus/Calculus • AP Statistics/Statistics
	Introductory Algebra • 2014-15	Algebra • 2015-16	Geometry • 2016-17	Algebra II / Honors • 2017-18 • Honors Un-Weighted	Year 4 Math • 2018-19 • AP Calculus/Calculus • AP Statistics/Statistics
Current 10 th Graders	Geometry • 2013-14	Algebra II / Honors • 2014-15 • Honors-Weighted	Pre-Calculus / Honors • 2015-16 • Honors-Weighted	Year 3 Math • 2016-17 • AP Calculus • AP Statistics • Statistics	Year 4 Math • 2017-18 • AP Calculus/Calculus • AP Statistics/Statistics
	Algebra 1 • 2013-14	Geometry / Honors • 2014-15 • Honors-Weighted	Algebra II / Honors • 2015-16 • Honors-Weighted	Pre-Calculus / Honors • 2016-17 • Honors-Weighted	Year 4 Math • 2017-18 • AP Calculus/Calculus • AP Statistics/Statistics

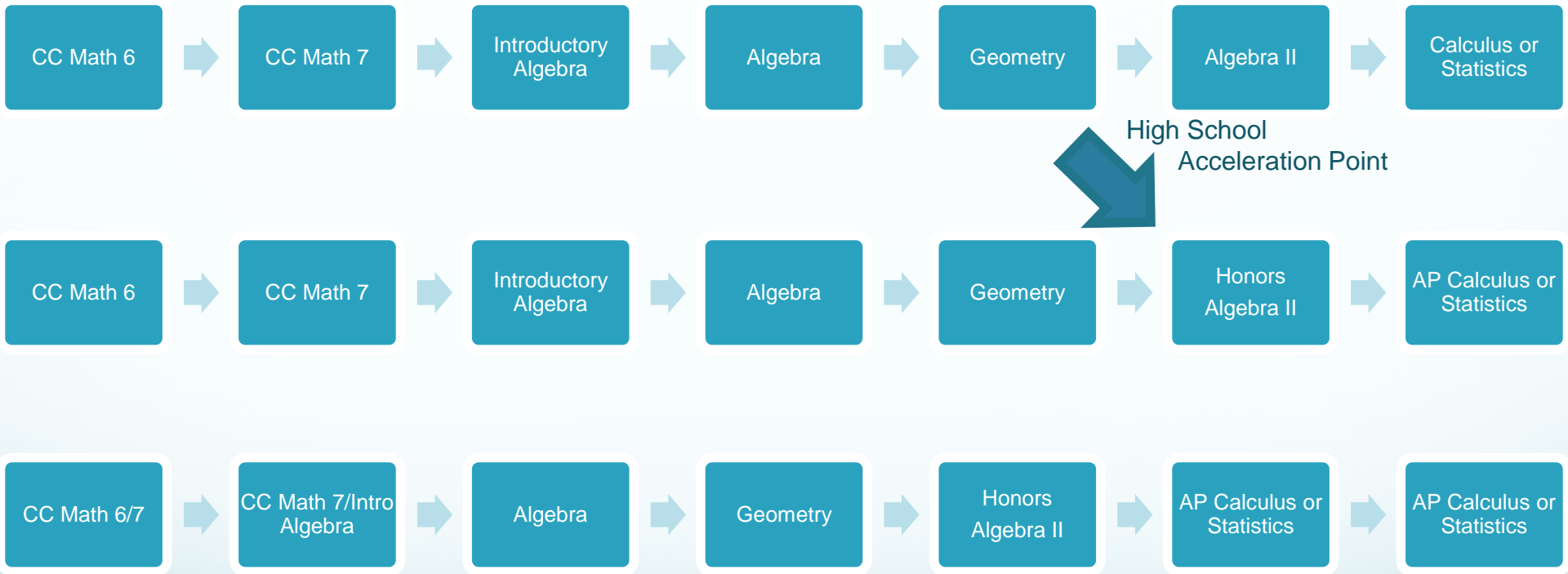
Un-Weighted Honors

Beginning with Class of 2019

(Current 9th Graders)

- In the past, Geometry Honors and Algebra II Honors were internally weighted. This meant students received an extra grade point on their LBHS GPA.
- UC/CSU Admissions does not provide honors designation for these lower level math courses nor does it count the extra weighting in admissions calculations.
- Other Orange County high schools no longer internally weight lower level honors courses. Un-weighting these courses will not change how they are reported to four-year universities.

Pathway for Students Beginning with Class of 2020



Accelerated Pathways are for students who have shown mastery of the CA State Standards and have advanced mathematical maturity.

Placement will be based on a comprehensive set of criteria.

Rational For Compacted Pathway...

- Teachers have deep knowledge of grade level standards
- With CAASPP scores now available, there are multiple objective performance measures for placement
- All Middle School students have the opportunity to enter the accelerated pathway
- There are multiple acceleration points available throughout middle school

Proposed Pathways...

- All Roads Lead to Calculus and Statistics
 - Grade Level
 - Accelerated
- Middle School Acceleration
 - Placement in accelerated pathways is based on multiple criteria, including an end of course exam, semester grades, and CAASPP results.

To “sum” it up:

- Replace summer “Bridge” program with compacted courses at the middle school level
- Add weighted credit back to Pre-Calculus for 2016-17

Middle School Placement Criteria

	Grade	CAASPP Score	End-of-year Assessment Score
4	A- to A+	2650-2700	90-100%
3	B- to B+	2600-2649	80%-89%
2	C- to C+	2550-2559	70-79%
1	D- to D+	2500-2549	60-69%
0	F	2450-2499	0-59%

**Students must earn a score of 11-12 in order to accelerate.

2015-2016 Current Path

Math 6 → Math 7 → Math 8

2016-2017 Proposed Accelerated Path

6/7 Compacted → 7/8 Compacted → Algebra

Students who complete the 6/7 compacted course must still achieve a “4-4-4 “ in order to enroll in the 7/8 compacted course.

Students who are enrolled in Math 6 as 6th graders may also be eligible for the 7/8 compacted class (they must meet the same criteria as accelerated 6/7 students).

Students who enroll from private school can take the interim CAASPP assessment to meet qualification criteria

SB 359 California Mathematics Placement Act of 2015

- Requires governing boards that serve pupils entering grade 9 to, *before the beginning of the 2016-17 school year*, develop and adopt, in a regularly scheduled public meeting, a fair, objective, and transparent mathematics placement policy for pupils entering grade 9 with specified elements, and would authorize governing boards or bodies of local educational agencies serving pupils who are transitioning between elementary and middle school or elementary and junior high school to develop and implement a mathematics placement policy for these pupils, as applicable, with these specified elements.

Mathematics Placement

LBUSD

- All placement decisions are based on multiple objective performance measures
- All students have access to the rigorous CA Common Core State Standards-based math courses through Algebra II
- Students have multiple acceleration points in both middle and high school
- Students who are struggling are provided support classes to accompany the grade level appropriate math courses
- By the 11th grade CAASPP and EAP tests, all students will have had the opportunity to take all three of the standards-based math courses tested (Algebra, Geometry, and Algebra II)

What are other districts doing?

School/District	Grade Levels	8 th Grade Accelerated	11 th Grade Accelerated	12 th Grade Accelerated	Notes
Laguna Beach USD	K-12	Algebra	AP Calculus or Statistics	AP Calculus or Statistics	8 th equivalent to Algebra
Anaheim UHSD	7-12	Integrated	Pre-Calculus	AP Calculus	Integrated - 8 th equivalent to Algebra
Newport Mesa USD	K-12	Enhanced Math 1	AP Calculus or Statistics	AP Calculus or Statistics	Integrated - 8 th equivalent to Algebra
San Dieguito UHSD	7-12	Integrated 1	AP Calculus or Statistics	AP Calculus or Statistics	Integrated - 8 th equivalent to Algebra
Tustin USD	K-12	Algebra 1	Pre-Calculus	AP Calculus	Geometry summer before HS
Capistrano USD	K-12	Geometry	Pre-Calculus	AP Calculus	Students can only take 1 year of AP Math
Fullerton SD	K-8	Geometry	NA	NA	
Saddleback Valley USD	K-12	Geometry	Pre-Calculus	AP Calculus	Students can only take 1 year of AP Math
Irvine USD	K-12	Enhanced Math 1	AP Calculus or Statistics	AP Calculus or Statistics	Integrated - 8 th equivalent to Algebra
Los Alamitos USD	K-12	Algebra 1	AP Calculus or Statistics	AP Calculus or Statistics	

All Roads Lead to Calculus and Statistics...