

# shasta EVERY OF

#### Chris Dell, Director of K-12 Math & Technology Judy Flores, Assistant Superintendent of Instructional Services

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**Mission**: Working together as a community to provide all students with all options for education and training after high school to pursue a successful, fulfilling career.

• 2010-11: REACH HIGHER Shasta Initiative

♦ 2011-12: Math Task Force; 8<sup>th</sup> grade focus

- 2012-13: High School Integrated Pathway
  - Articulation with Middle School; Acceleration plan

2013-14: HS Integrated Math 1 (& Math 2)
 Curriculum Discussion; Articulation with MS



## High Schools Collectively chose the CCSSM Integrated Course pathway

- The integrated high school course pathway is a more balanced presentation of the material over the 3 year program than the traditional alg-geo-alg approach.
- Linear and Exponential functions (no quadratics) focus in Math 1 is mathematically coherent.
- Consistent with the focus and coherence of K 8 mathematics content
- CC Algebra 1 ≠ 1997 CA Algebra 1, etc. (less parent/teacher misconceptions)
- Life is integrated.

The MS & HS Math grade level integrated course pathway

 This approach is typically seen internationally (Integrated) that consists of a sequence of three courses, each of which includes number, function, algebra, geometry, probability and statistics Courses in higher level mathematics: PreCalculus, Advanced Statistics, or other higher math course (not AP Calculus).



#### MS & HS Math Honors integrated course pathway

The three grade level HS integrated pathway courses that also includes the CCSS plus (+) standards (PreCalculus Standards) appropriately aligned to each conceptual cluster and distributed *evenly* among the three courses.

The MS honors courses are cover the same content standards as defined in the CCSSM for grade 7 & 8, but with greater depth and more emphasis on higher cognitively complex tasks. Courses in higher level mathematics: AP Calculus, Advanced Statistics, or other high math course.



Grade 11: Advanced Math III

Grade 10: Advanced Math II

Grade 9: Advanced Math I

Grade 8: Honors CCSS Math 8

Grade 7: Honors CCSS Math 7



## Continued CCSSM Collaboration and Support

Articulation with Middle and High School teachers

- Instructional Resources, Modeling, Teaching the Why & Where before the How, Assessment, Placement, etc.
- Focus sessions for teaching math for conceptual understanding and procedural fluency.
- Integrated High School Honors course development
  - Aligning the Precalculus standards with the Math 1, 2 & 3 course standards.



### Successes and Challenges

- Successes
  - "Integrated" allows for shift from the How to Why and Where
  - Relevance; problem solving tasks
- Challenges
  - Transfer students; gaps in learning
  - Teachers not knowing how to implement instructional strategies to best align to standards and SMPs: Dependence on curriculum REA
  - Parent communication
- Both: Reading, writing and collaboration in the math class