

6-8 Expressions and Equations Progression

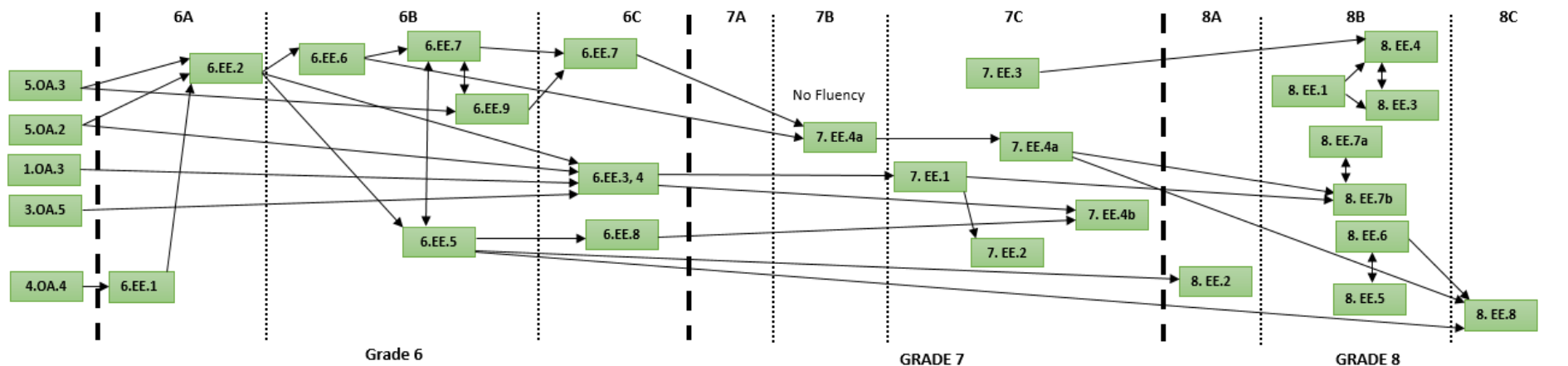
Grade 6	Grade 7	Grade 8
Expressions and Equations [6-EE and 7-EE and 8-EE]		
Apply and extend previous understanding of arithmetic to algebraic expressions. 1, 2, 2a, 2b, 2c, 3, 4	Use properties of operations to generate equivalent expressions. 1, 2	Work with radicals and integer exponents. 1, 2, 3, 4
Reason about and solve one-variable equations and inequalities. 5, 6, 7, 8	Solve real-life and mathematical problems using numerical and algebraic expressions and equations. 3, 4, 4a, 4b	Understand the connections among proportional relationships, lines, and linear equations. 5, 6
Represent and analyze quantitative relationships between dependent and independent variables. 9		Analyze and solve linear equations and pairs of simultaneous linear equations. 7, 7a, 7b, 8, 8a, 8b, 8c
Standards for Mathematical Practice		

Mathematics is a subject that builds understanding and skill on previous knowledge. Here are various ways to look at the connections between standards from grade to grade. How do these compare to the connections made **within** and **across** grades in the Progression document?

The A-B-C grouping is an attempt to show prerequisite skill and knowledge preceding later content. How would you order the content throughout a school year for the grade you teach?

Key standards are the result of either many standards building to one, or one standard that is a launching point into many other standards. Find an example of a key standard in the wiring diagram and study the progression.

Jason Zimba's "wiring diagram"



In Zimba's wiring diagram, how would you account for the connection and flow between the standards that he presents? How do you understand the placement of standards into three parts of the school year (not a trimester system)? Explain the specifics of how math content is both connected and builds over time for your grade and for the surrounding grades.

Your collaborative team should discuss implementation of the CCRS clusters at your grade level – looking at what is familiar, what is new or challenging (for students), and what needs unpacking or emphasis (in the lesson for students). "Analysis and related discussion with your team is critical to develop mutual understanding of and support for consistent curricular priorities, pacing, lesson design, and the development of grade-level common assessments." (pg. 67) Together you can develop a greater understanding of the intent of each content standard cluster and how the standards are connected within and across grades. (Common Core Mathematics in a PLC at Work, Kanold, 2012).