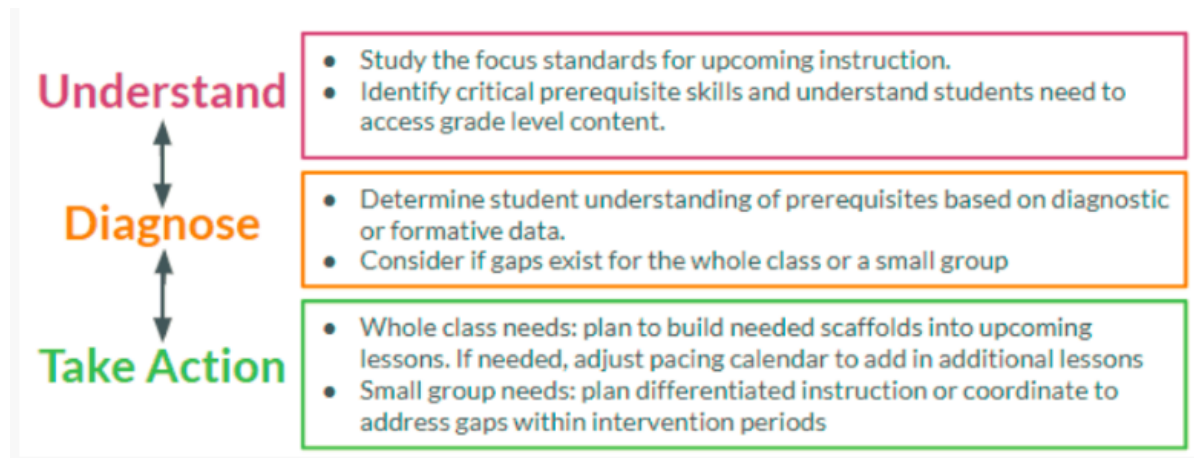


FFC8 Philosophy for Addressing Unfinished Learning in Mathematics

Purpose: Educators in Fountain-Fort Carson School District 8 have unique challenges and opportunities in relation to teaching and learning due to our highly mobile student population. We believe all students have the right to engage in best, first instruction that is developed from grade-level standards and curriculum, and we acknowledge that different students during different modules of instruction may need support with the foundational prerequisite content necessary in order to access this best, first instruction. This document and the accompanying Module Guidance for Addressing Unfinished Learning synthesize information from leading organizations (TNTP, NCTM and NCSM, Student Achievement Partners, Instruction Partners) around how to best support unfinished learnings in mathematics and move students forward in their learning of grade-level standards.

Vision: Rather than using traditional remediation techniques, we focus on accelerating student learning by providing students with just-in-time supports related to the standards of instruction in the current module of learning. These just-in-time supports focus on building skills related to the necessary prerequisite standards (load-bearing prerequisites) from previous grade-levels and/or current grade-level modules of instruction so that we engage all students in grade level mathematics content. Too often, math is treated like a linear sequence of learning or a checklist of skills. Teaching math is actually like helping students build a house: Some walls are load-bearing and need to be strong before moving up a level; other walls can be useful for connections but should not be considered prerequisites. We identify the content knowledge and skills students are struggling with in their current grade level, and we fill those gaps “just in time,” when the material occurs in the school year. As we plan and prepare for learning experiences, we ask ourselves: Will this help every student get back to grade level? Accelerating learning requires that students consistently receive grade-level materials, tasks, and assignments, along with appropriate scaffolds that make the work accessible. Our focus is on filling in only the most critical gaps (load-bearing walls) at the moment they’re needed.



Structures that Organize Students for Instruction	
Productive Classroom Structures	Questions to Consider
Engage in heterogenous groupings, both between and within classes, where expectations for learning are high and the greatest gains can be made collectively for all students. Provide differentiated support for each student to reach grade-level standards by designing rich Tier 1 instruction that allows for multiple entry points, solution pathways, and responses and uses a range of approaches. Provide just-in-time interventions during the school day that do not replace daily, grade-level instruction and are designed on the basis of the results from effective formative assessments. Students move in and out of flexible interventions, as needed. Prioritize and build students' conceptual understanding within lessons as opposed to learning "tricks" for answer-getting.	In what ways are we organizing our students for instruction so that each and every learner has access to high-quality mathematics instruction? What structures exist to support students with diverse learning needs? How do we embrace a strength-based view of learning? How do we ensure all students are engaging with tasks that require higher level thinking?

Determining Essential Learning for All Students	
Potential Resources	Questions to Consider
District 8 Math Curriculum Maps - Major, Supporting, and Additional Work of the Grade - Coherence Connections <i>Eureka Math Squared</i> Teach Books FFC8 Guidance for Addressing Unfinished Learning	What is the math story for the module? What are the essential learnings and load-bearing walls for the upcoming grade-level module? How have we allocated the time and created the structures to meet as grade-level teams to plan out daily instruction around the essential learnings?

Determining Necessary Prior Knowledge

Potential Resources	Questions to Consider
District 8 Math Curriculum Maps Coherence Connections	What are common misconceptions or prerequisite understandings in this module?
FFC8 Guidance for Addressing Unfinished Learning (by grade level and module)	What instructional strategies or tasks have been proven to be effective that we will commit to using?
Achieve the Core Coherence Map	How will we focus pre-assessment work on conceptual understanding rather than procedural skill?

Determining What Students Know	
Potential Resources	Questions to Consider
<i>Eureka Math Squared</i> Equip Module Assessment	How can we focus on using formative assessment processes to provide quality feedback that empowers learning?
<i>Eureka Math Squared</i> Exit Tickets	What information is needed from the formative assessment tasks to provide support for the grade-level essential learnings?
<i>Eureka Math Squared</i> Topic Quizzes	
<i>Eureka Math Squared</i> Lessons and Problem Sets	How might mathematical tasks, student discussion, and/or writing prompts be incorporated to determine students' previous understanding in place of pretests and posttests?

Effective Mathematics Teaching Practices	
Potential Resources	Questions to Consider
8 Effective Mathematics Teaching Practices - Establish mathematical goals to focus learning - Implement tasks that promote reasoning and problem solving - Use and connect mathematical representations - Facilitate meaningful mathematical discourse - Pose purposeful questions - Build procedural fluency from conceptual understanding	How will we use evidence of student thinking to inform our teaching practices and advance student learning? How will we elevate the focus on the Standards for Mathematical Practice through our instructional practices?

• Support productive struggle in learning mathematics • Elicit and use evidence of student thinking 5 Equity Based Math Practices • Going deep with mathematics • Leveraging multiple mathematical competencies • Affirming mathematics learners' identities • Challenging spaces of marginality • Drawing on multiple resources of knowledge	
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References:

The Achievement Network, Ltd. 2020. *Important Prerequisite Math Standards*. Retrieved from <https://docs.google.com/document/d/1YVIYSdzX1WHt4CYSfRtpf1102a4-lrMZ25ntuK25uk/edit>.

Aguirre, J. 2013. *The Impact of Identity in K-8 Mathematics Learning and Teaching: Rethinking Equity-based Practice*. Reston, VA: The National Council of Teachers of Mathematics.

Allison, C. 2017. *Addressing Unfinished Learning in the Context of Grade-Level Work*. Retrieved from <https://achievethecore.org/aligned/addressing-unfinished-learning-context-grade-level-work/>.

Great Minds PBC. 2021. *Eureka Math Squared*. USA.

Instruction Partners. 2022. *Addressing Unfinished Learning*. Retrieved from www.instructionpartners.org.

National Council of Teachers of Mathematics. 2014. *Principles to Actions: Ensuring Mathematical Success for All*. Reston, VA.

National Council of Teachers and Mathematics, and National Council of Supervisors of Mathematics (NCSM). 2020. *Moving Forward: Mathematics Learning in the Era of COVID-19*. Retrieved from https://www.nctm.org/uploadedFiles/Research_and_Advocacy/NCTM_NCSM_Moving_Forward.pdf.

Student Achievement Partners. 2020. *2020-2021 Priority Instructional Content in ELA/Literacy and Mathematics*. Retrieved from <https://achievethecore.org/page/3267/2020-21-priority-instructional-content-in-english-language-arts-literacy-and-mathematics>.

TNTP. 2020. *Restarting School: Planning for Acceleration in the 2020-2021 School Year*. Retrieved from <https://tntp.org/covid-19-school-response-toolkit/view/learning-acceleration-guide>.