

AASD 5K-12 Best Practices & Pedagogy in Teaching Mathematics

BUILDING UNDERSTANDING

Increase	Decrease
<ol style="list-style-type: none"> 1. Provide challenging and stimulating opportunities for ALL students 2. Provide students opportunity to connect and transfer prior knowledge to ongoing and future learning experiences 3. Share responsibility for learning with students by supporting a classroom community with cooperation, shared responsibility and respect 4. Provide opportunities for mathematical discourse 5. Differentiate instruction to consider individual student's interests, strengths, experiences, cultural backgrounds and needs 6. Foster a growth mindset by acknowledging that mistakes are an essential part of the learning process 7. Provide multiple opportunities to demonstrate learning 	<ol style="list-style-type: none"> 1. Provide opportunities that favor certain groups of students 2. Provide direct instruction regardless of student's prior knowledge 3. Teacher is solely responsible for the learning 4. Focus on recitation of procedural knowledge 5. Treat all students alike and respond to the group as a whole 6. Foster a fixed mindset by not acknowledging the power of mistakes and multiple methods to find answers 7. Identify students as skilled/unskilled based on a single, high-stakes assessment

PROMOTING INQUIRY

Increase	Decrease
<ol style="list-style-type: none"> 1. Implement inquiry as a strategy for learning mathematics 2. Interpret and analyze evidence for developing or revising an explanation 3. Student collaboration 	<ol style="list-style-type: none"> 1. Learning as a set of processes 2. Get an answer for the sake of getting an answer 3. Students working individually

ASSESSMENT

Increase	Decrease
<ol style="list-style-type: none">1. Assess student understanding through multiple representations (visual, symbolic, verbal, contextual, physical)2. Use of assessments for providing students with timely and quality feedback3. Use of assessment data in order to inform and adjust instruction4. Use of PLC time to reflect, develop, and adjust common assessments	<ol style="list-style-type: none">1. Assess student understanding through only recall of algorithms2. Assess students without providing quality feedback3. Assess students only at the end of the unit, chapter, or term4. Use of assessments without any collaborative reflection on instructional practices

IMPLEMENTING THE CURRICULUM

Increase	Decrease
<ol style="list-style-type: none">1. Implement Board approved resource with fidelity2. Implement curriculum in a consistent scope and sequence3. Connect mathematics to other content areas	<ol style="list-style-type: none">1. Replacement of Board approved resource with supplemental resource2. Implement curriculum scope and sequence inconsistently3. Treat mathematics as a subject isolated from other school subjects

~~Revised March 12, 2018~~

Revised March 24, 2022

~~Finalized April 9, 2018~~