

Math Success with DMTI

STANDARDIZED TESTING: INSIGHTS AND TOOLS FOR EDUCATORS

In today's edition, we explore:

- The Purpose and Design of State Assessments
- Using Assessment Blueprints to Guide Instruction
- Integrating Content Domains for Deeper Learning

Educators!

This week, we are diving into "Standardized Testing: Insights and Tools for Educators." This newsletter tackles essential questions about summative state tests, clarifies common misconceptions, and offers practical recommendations to help teachers align instruction with assessment demands.

The Importance of Understanding State Assessments

State tests are high-stakes, summative assessments designed to measure student learning at the end of the year and compare performance against benchmarks. Unlike formative assessments, which are embedded in daily instruction and provide ongoing feedback, state tests focus on evaluating outcomes and informing policy at the school, district, and state levels.

Knowing the distinction between formative and summative assessments helps educators use each tool effectively: formative assessments to guide and adjust instruction in real time, and summative assessments to reflect on overall learning and system-wide trends.

Practical Applications: Assessment Blueprints in Action

Assessment blueprints detail the structure of standardized tests, including item types, cognitive demands, and the integration of multiple standards. By studying blueprints from SBAC and PARCC, teachers can identify priority areas and design lessons that reflect the complexity of real-world problem-solving.

Classroom Example:

In third-grade place value instruction, teachers can differentiate tasks using the DMTI assessment framework:

- **Level 1 (Skill/Recall):** Identify the tens digit in the number 243.
- **Level 2 Problem Solving (L2P):** Lila has 34 crayons. Her friend Max has 18 crayons. How many more crayons does Lila have than Max?

- **Level 2 Conceptual (L2C):** Using a number line, show what happens when you multiply $\frac{2}{3}$ by $\frac{1}{2}$. Explain in words what each step represents and what the answer means in the context of the number line.
- **Level 3 (Reasoning/Justification):** Explain how the standard multiplication algorithm connects to the area model by justifying each algorithm step with a corresponding part of the area representation. Why does this connection help us understand how multiplication works?

Integrating Content Domains for Deeper Learning

State tests frequently assess multiple standards within a single item. For example, a Grade 3 task might require students to calculate a garden's area using multiplication and represent the solution with an area model—combining arithmetic and geometry. In Grade 4, students might analyze a bar graph of apple harvests to determine equivalent fractions, integrating data analysis with fraction concepts. Designing lessons that mirror this integration prepares students for the multidimensional expectations of state assessments and fosters real-world problem-solving skills.

Why Does This Matter?

Research shows that when teachers engage students in cognitively demanding tasks—reasoning, justifying, and applying knowledge in new contexts—students develop foundational skills that transfer to the classroom and standardized assessments. Understanding assessment frameworks and blueprints empowers teachers to design meaningful learning experiences that support every student's success.

How Are You Aligning Instruction with Assessment?

We would love to hear your ideas! Email us at mathsuccess@dmthinstitute.com to share your insights for future newsletters. Keep developing mathematical thinking!

MORE INFORMATION

This is a quick summary of this topic, but if you want to download and read the research overview or watch the video, go to **Research Overviews** at dmthinstitute.com/research

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