



Dyscalculia: Secondary Instructional Strategies



Overview

Dyscalculia is a learning disability that affects how students learn, understand, and remember math (www.thedtri.org). More than 2 million U.S. students have a Specific Learning Disability, including dyscalculia, the math learning disability (www.ncld.org). For many students with dyscalculia, the transition to algebraic thinking can take longer than their peers because basic facts may not be memorized, steps and procedures may be hard to follow, and math information will be forgotten over time. These students struggle with numeracy, fluency, and following steps and procedures. Still, these students can succeed at grade level math with the right support. Research shows students thrive when they have access to specially designed instruction, intervention, and appropriate accommodations (www.ldaamerica.org). Because math demands are embedded in many subjects, these supports should extend to science and technical courses.

WHY THIS MATTERS IN NEW JERSEY

In New Jersey, 32% of special education students (about 38,000) have a Specific Learning Disability like dyscalculia, affecting their success in secondary math.

- Teachers can use clear, step-by-step instruction with visual supports and regular checks for understanding to strengthen accuracy, reasoning, and close skill gaps.

Best Practices



Say Exactly What You Mean

Specially Designed Instruction helps make lessons clear and accessible. Provide each step and check in with questions along the way, creating a supportive environment where students feel comfortable expressing when they need help.



Promote Precision over Memorization

For secondary students with dyscalculia, tools like number lines, reference charts, and calculators support problem-solving, while self-checking their work offers repeated practice that reinforces accuracy and deepens understanding.



Point Out Patterns and Connections

Low numeracy skills make seeing patterns in exponents, factoring, and sequences harder. Help students make connections. Use color to increase focus on important details like intercepts, angles, and negative signs.

Links



[Dyscalculia Fact Sheet](http://www.thedtri.org)
(from www.thedtri.org)



[What is Dyscalculia?](https://www.understood.org)
(from <https://www.understood.org>)

