

DYSCALCULIA

Evidence-Based Programs, Grade Ranges, Costs, IEP Goal Language & Publisher Contacts

Prepared by WYO Right to Read | May 31, 2026

Section 1: Understanding Dyscalculia — IDEA Eligibility & Classification

Dyscalculia is a specific learning disability (SLD) affecting number sense, arithmetic fact retrieval, and/or mathematics reasoning. It is distinct from math underachievement due to poor instruction or opportunity gaps, and requires documented processing deficits.

Under IDEA, dyscalculia is documented as an SLD in one or both of the following areas:

- Mathematics Calculation (34 CFR § 300.309(a)(1))
- Mathematics Problem Solving (34 CFR § 300.309(a)(1))

Eligibility requires ALL THREE of the following:

- A pattern of strengths and weaknesses in performance, achievement, or both, relative to age/grade-level standards
- A documented psychological processing deficit (e.g., working memory, processing speed, phonological processing, visual-spatial processing)
- Insufficient response to evidence-based intervention (documented through progress monitoring data)

Important: Low math achievement alone does NOT establish dyscalculia eligibility. The psychoeducational evaluation must identify the underlying processing deficit.

Co-Occurrence with Dyslexia:

Research indicates that dyslexia and dyscalculia co-occur in approximately 40–50% of cases. They share some processing challenges (working memory, processing speed, sequencing) but have distinct profiles. IEP teams must assess and address BOTH the language of math AND the number sense/spatial reasoning deficits specific to dyscalculia. A student's IEP should reflect both profiles with separate measurable goals.

Section 2: Evidence-Based Instructional Programs

The following programs have research support for use with students identified with dyscalculia or specific learning disabilities in mathematics. Each entry includes grade range, publisher contact information, approximate cost, evidence rating, and recommended IEP goal language.

1. Number Worlds / Math Recovery	
Grade Range	PreK–6
Publisher / Source	McGraw-Hill (Number Worlds); Math Recovery Council (Math Recovery)

Approximate Cost	Number Worlds: school license ~\$3,000–\$8,000/school; Math Recovery: training \$500–\$1,200/instructor + materials
Contact	Math Recovery Council: mathrecovery.org (888) 567-0955 Number Worlds: mheducation.com (800) 338-3987
Evidence Rating	Strong — multiple IES What Works Clearinghouse reviews; particularly effective for students with math learning disabilities (MLD)
Program Description	Builds number sense through sequential, individualized intervention. Rooted in constructivist learning theory with systematic skill progression. Math Recovery provides intensive 1:1 or small group instruction based on diagnostic interviews.
IEP Goal Language	Student will receive Tier 3 math intervention using a Math Recovery-aligned number sense curriculum, with instruction progressing through the Learning Framework in Number sequence, with weekly progress monitoring using curriculum-based measures.
Key Strengths	• Strong research base with MLD populations • Individualized diagnostic starting point • Small group or 1:1 delivery • Sequential and explicit skill progression

2. Connecting Math Concepts (CMC) / SRA

Grade Range	K–8
Publisher / Source	McGraw-Hill / SRA
Approximate Cost	\$800–\$2,500 per level (teacher materials + student workbooks); online version available
Contact	mheducation.com (800) 338-3987
Evidence Rating	Strong — What Works Clearinghouse positive rating; direct instruction research base (Project Follow Through lineage)
Program Description	A comprehensive direct instruction curriculum providing explicit, systematic, cumulative skill-building across all math strands. Scripts are provided for teacher delivery, ensuring fidelity. High-structure lessons are predictable for students who struggle with processing variability.
IEP Goal Language	Student will receive explicit, systematic math instruction using Connecting Math Concepts curriculum at the appropriate level, delivered with fidelity to the scripted lesson format, with biweekly curriculum-based measurement probes to monitor rate of progress.
Key Strengths	• Highly structured scripted lessons • Explicit and cumulative • Covers all math strands • Low cognitive load during instruction

3. TouchMath

Grade Range	PreK–6 (remediation through adult)
Publisher / Source	Innovative Learning Concepts
Approximate Cost	Starter kits: ~\$200–\$500; classroom kits: ~\$500–\$1,500; digital subscription available
Contact	touchmath.com (800) 888-9191
Evidence Rating	Moderate — peer-reviewed studies support use with special education populations; particularly strong for students with both dyslexia and dyscalculia
Program Description	Multisensory approach using touchpoints on numerals (1–9) to anchor counting. Students touch and count points on each numeral to perform operations, providing a concrete anchor that bypasses working memory limitations. Particularly beneficial when phonological and quantitative processing deficits co-occur.
IEP Goal Language	Student will use TouchMath multisensory techniques (touchpoints and auditory counting strategies) as an approved accommodation and instructional method for all mathematics computation tasks, including on assessments when appropriate.
Key Strengths	
	• Multisensory — visual, tactile, auditory
	• Reduces working memory load
	• Good for co-occurring dyslexia + dyscalculia
	• Available in digital format

4. Ronit Bird Resources

Grade Range	Elementary through Secondary (remediation focus)
Publisher / Source	Ronit Bird (independent educator/author)
Approximate Cost	\$20–\$50 per book/resource; many free activities on ronitbird.com
Contact	ronitbird.com
Evidence Rating	Emerging — practitioner-developed, widely used in UK dyscalculia specialist community; aligned with Sharma and Butterworth theoretical frameworks
Program Description	Specifically designed for dyscalculia remediation. Focuses on dot patterns, fingers, and visual-spatial anchoring to build subitizing and number sense from the ground up. Books include 'The Dyscalculia Toolkit' and 'Overcoming Difficulties with Number.' Excellent for students who have not responded to standard interventions.
IEP Goal Language	Student will receive supplemental number sense instruction using Ronit Bird dyscalculia-specific strategies, including subitizing, dot pattern recognition, and visual-spatial quantity anchoring, delivered by a specialist trained in dyscalculia intervention.
Key Strengths	
	• Dyscalculia-specific design
	• Subitizing and dot pattern focus
	• Low-cost / accessible resources
	• Fills gap when standard programs fail

5. Do The Math (Scholastic / Marilyn Burns)

Grade Range	2–6 (intervention for grades 3–8)
Publisher / Source	Scholastic / Math Solutions
Approximate Cost	\$300–\$800 per module per classroom; district licenses available
Contact	scholastic.com (800) 724-6527
Evidence Rating	Moderate — positive results in randomized controlled trials; endorsed by NCTM for foundational operations
Program Description	Research-backed intervention targeting whole number operations (addition, subtraction, multiplication, division) and fractions. Lessons are structured, engaging, and hands-on, with clear routines. Particularly effective for closing arithmetic gaps that underlie algebra readiness.
IEP Goal Language	Student will receive supplemental mathematics intervention using Do The Math modules targeting [specific module], with weekly progress monitoring on computation fluency probes (e.g., AIMSWEB Math Computation).
Key Strengths	
	Engaging, structured lessons
	Fractions module is particularly strong
	Clear routines reduce cognitive load
	Good teacher support materials

6. Algebra Readiness (Voyager Sopris)

Grade Range	5–9 (intervention)
Publisher / Source	Voyager Sopris Learning
Approximate Cost	\$400–\$1,200 per student kit; school licensing available
Contact	voyagersopris.com (800) 547-6747
Evidence Rating	Moderate — research-based; designed to close arithmetic-to-algebra gap for students with learning disabilities
Program Description	Structured math intervention program bridging gaps between arithmetic mastery and algebra readiness. Addresses integers, rational numbers, equations, and proportional reasoning using explicit instruction and scaffolding. Appropriate for middle school students with persistent math learning disabilities.
IEP Goal Language	Student will receive Algebra Readiness intervention to address foundational mathematics deficits in [integers / rational numbers / proportional reasoning], with monthly progress monitoring using criterion-referenced assessments embedded in the curriculum.
Key Strengths	
	Bridges arithmetic-to-algebra gap
	Explicit instruction model
	Appropriate for secondary students
	Scaffolded problem-solving sequences

Section 3: Essential Instructional Methodologies (IEP-Documentable)

These are not named programs but research-validated instructional approaches that should be explicitly referenced in IEP Present Levels and Services sections. They are often more important than the specific curriculum selected.

Methodology	Grade Range	Notes for IEP Teams
Concrete-Representational-Abstract (CRA)	All grades	Students move manipulatives → pictures/drawings → abstract symbols. Must be IEP-documented as a required methodology, not just a preference.
Explicit Instruction with Worked Examples	All grades	Teacher models thinking aloud; students practice with immediate corrective feedback. Required for SLD in mathematics.
Spaced Practice & Interleaving	K–12	Distributes practice across sessions; mixes problem types. Improves long-term retention significantly vs. massed practice.
Vocabulary & Language of Math	K–12	Explicit teaching of mathematical vocabulary — especially critical for students with co-occurring dyslexia. Use visual vocabulary walls.
Extended Time + Reduced Quantity	All grades	Reduces cognitive load and performance anxiety. Should appear as both an IEP accommodation and on testing plans.

Section 4: Sample IEP Goal Language by Grade Band

The following goal templates are written to meet IDEA requirements for specificity, measurability, and alignment to the student's identified area of SLD. Replace bracketed terms with student-specific data. Each goal should be accompanied by a progress monitoring method (e.g., CBM-Math, curriculum-embedded probes, AIMSWEB+).

Goal Area	Sample Goal Language
Number Sense (Elementary)	Given a set of up to 20 objects, [Student] will accurately subitize and quantify using dot patterns or TouchMath touchpoints with 85% accuracy across 4 of 5 trials by [date].
Computation (Elementary)	Given 20 single-digit addition and subtraction facts, [Student] will answer with 80% accuracy and automaticity (no counting strategies) across 3 consecutive probes by [date].
Operations (Middle)	Given 10 multi-step word problems involving multiplication and division of whole numbers, [Student] will correctly set up and solve problems using CRA sequence with 80% accuracy by [date].
Fractions (Middle)	Given 10 problems involving addition and subtraction of unlike fractions, [Student] will accurately identify common denominators and compute answers with 75% accuracy by [date].
Algebra Readiness (Secondary)	Given 10 one- and two-step equations with integers, [Student] will solve correctly using a graphic organizer scaffold with 80% accuracy across 4 of 5 sessions by [date].
Math Vocabulary	Given 15 grade-level math vocabulary terms, [Student] will accurately define and apply each term in context with 85% accuracy across 3 consecutive probes by [date].

Section 5: Recommended IEP Accommodations for Dyscalculia

Instructional Accommodations

- Extended time on all mathematics tasks and assessments (1.5x or 2x standard time)
- Reduced quantity of problems (fewer items assessing same skill — quality over quantity)
- Use of manipulatives and math tools (number lines, base-10 blocks, fraction tiles) during instruction AND testing
- Graph paper or pre-lined paper for all computation work (supports alignment and spatial organization)
- Multiplication table / fact chart (after determining memorization is not a realistic goal)
- Calculator for computation when the assessed skill is problem-solving, not calculation
- Step-by-step procedure cards / graphic organizers for multi-step problems
- CRA sequence used for all new concept introduction (non-negotiable methodology notation)

Assessment Accommodations

- Extended time (see above)
- Problems read aloud to student (for co-occurring reading disabilities)
- Reduced answer choices on multiple-choice math items
- Partial credit for setting up problem correctly even if computation contains errors
- Separate testing location if anxiety is documented

Environmental/Technology Accommodations

- Preferential seating near teacher or board
- Approved calculator use (specify: basic, scientific, or graphing by grade level)
- Math-specific assistive technology (e.g., Desmos, ModMath app for graph paper alignment, Photomath for step-by-step checking)
- Text-to-speech for word problems if dyslexia co-occurs

Section 6: Publisher Quick Reference

Program	Phone	Website
Number Worlds / Math Recovery	(888) 567-0955 (MRC) (800) 338-3987 (McGraw)	mathrecovery.org mheducation.com
Connecting Math Concepts (SRA)	(800) 338-3987	mheducation.com
TouchMath	(800) 888-9191	touchmath.com
Ronit Bird Resources	N/A (individual)	ronitbird.com
Do The Math (Scholastic)	(800) 724-6527	scholastic.com
Algebra Readiness (Voyager Sopris)	(800) 547-6747	voyagersopris.com

Section 7: Additional Resources & Organizations

- Dyscalculia.org — dyscalculia.org | Practitioner resources, screeners, parent guides
- Math Recovery Council — mathrecovery.org | (888) 567-0955 | Trainer directory, professional development
- National Center on Intensive Intervention (NCII) — intensiveintervention.org | Free math intervention tools chart with evidence ratings
- What Works Clearinghouse (WWC) — ies.ed.gov/ncee/wwc | Evidence ratings for all programs listed above
- UNDERSTOOD.org — understood.org | Parent-facing dyscalculia explainers and IEP preparation guides
- Brian Butterworth (UCL) — mathematicalbrain.com | Leading dyscalculia researcher; free screener research available
- Ronit Bird — ronitbird.com | Free downloadable dyscalculia activities; professional resources

WYO Right to Read

Advocacy, Education, and Evidence-Based Literacy & Numeracy Support for Wyoming Students

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