

Do The Math Now!

Aligns to IDEA, Part B EDUCATION OF CHILDREN WITH DISABILITIES

The purpose of *IDEA*, *Part B*—*Formula Grant Programs* is to assist states in providing a free, appropriate public education (FAPE) in the least restrictive environment for children with disabilities ages 3 through 21. The following chart shows how **Do The Math Now!** can support children with disabilities under IDEA, based on key components and recommendations from IDEA, Part B, Section 611. The criteria are drawn from the Federal *IDEA*, *Part B Final Rules and Regulations*, posted at:

http://www2.ed.gov/programs/osepgts/index.html

| Components of a IDEA, Part B Program | Do The Math Now! |
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| Provide research-based and scientifically validated interventions | Do The Math Now!, developed by Marilyn Burns, is an intensive intervention program for students in Grades 6-12 who have fallen behind. Designed to build numerical foundations necessary to prepare students for Algebra, Do The Math Now! focuses on developing understanding and facility with whole numbers and fractions. By spending time developing unifying ideas, students build deep understanding, learn to reason mathematically, make connections across operations, and apply their skills to higher-level mathematics—critical foundations of Algebra. |
| | Do The Math Now! is organized into two volumes—Multiplication & Division and Fraction Fundamentals. Both volumes are organized into five units, each with fifteen 30-minute lessons. |
| | Multiplication & Division develops visual representations and reasoning skills that strengthen students' conceptual understanding and computational skills. At the foundation of the lessons are applying the place-value structure of the number system and properties of numbers. |
| | Fraction Fundamentals strengthens students' conceptual understanding of fractions. By developing mental representations, students use number sense as they compare, order, and explore equivalent fractions. The goal is to help students develop the understanding and skills to reason, estimate, add, and subtract with fractions. |
| | RESEARCH |
| | Do The Math Now! is a curriculum for math intervention that is carefully and intentionally sequenced to build numerical foundations in multiplication, division, and fractions for students in Grades 6 and above. The program was developed to address the NAEP data which revealed that 65% of students in Grade 8 are at or below a basic level of math proficiency. The National Mathematics Advisory Panel identified fluency with whole numbers and fluency with fractions as critical foundations for Algebra. CONTINUED |

| Provide research-based and scientifically validated interventions Continued | Do The Math Now! builds whole-number and fraction foundations, constructing a framework for learning that rebuilds students' cognitive structures for understanding mathematics in order to prepare them for Algebra. The program focuses on developing a deep conceptual base for students who are below grade level. The Do The Math Now! instructional design applies what is known about a wide variety of students who struggle with math to achieve proficiency with Arithmetic concepts and skills by incorporating eight research-based guiding principles—Scaffolded Content, Explicit Instruction, Multiple Strategies, Gradual Release, Student Interaction, Meaningful Practice, Assessment & Differentiation, and Vocabulary & |
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| scientifically validated interventions | Language. For more information about the <i>Do The Math</i> Research Foundation, |
| | please see: http://teacher.scholastic.com/products/dothemath/research.htm |
| Provide access to the Core Curriculum taught in General Education classrooms | Do The Math Now! consists of two volumes—Multiplication & Division and Fraction Fundamentals—that support struggling students in learning key concepts and skills. |
| | Multiplication & Division |
| | These lessons strengthen students' skills and develop their number sense in ways that prepare them for the structures of Algebra. Lessons focus on place value to model how numbers can be composed and decomposed. |
| | Unit 1: Build a Foundation for Multiplication Unit 2: Develop Multiplication Number Sense Unit 3: Use Place Value Strategies to Multiply Unit 4: Connect Multiplication and Division Unit 5: Use Place Value Strategies to Divide |
| | Fraction Fundamentals |
| | These lessons focus less on procedures and more on conceptual understanding. Students learn to estimate, add, and subtract fractions using strategies proven to help understand the meaning behind the math. |
| | Unit 6: Develop Understanding of FractionsUnit 7: Reason with Fractions |
| | Unit 8: Extend Fraction Concepts and Compare Strategies Unit 9: Build on Equivalence to Estimate, Compare, Add, and Subtract Unit 10: Develop Fraction Number Sense |
| Use Supplemental Instructional materials, where appropriate, to strengthen the efficacy of the comprehensive core curriculum | WorkSpace is an interactive student book where students demonstrate their learning through numbers and visual representations. For each <i>Do The Math Now!</i> lesson, there is a corresponding WorkSpace assignment, which provides adequate space for students to show their work when solving math problems. This allows teachers to monitor students' thought processes and understanding of the procedure for solving problems. CONTINUED |

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| Use Supplemental Instructional materials, where appropriate, to strengthen the efficacy of the comprehensive core curriculum Continued | The WorkSpace also includes pages to record important math and academic vocabulary words. Students write a definition and show an example or draw a picture for each new vocabulary word to establish a visual representation. Students also have access to the WorkSpace Glossary, which includes the new vocabulary they learned throughout the lessons. Games are also embedded throughout Do The Math Now! lessons to engage students in learning, reviewing skills and concepts, and building confidence. Each lesson is accompanied by an Interactive Whiteboard lesson with virtual game playing tools, including number cubes, connecting cubes, fraction strips, fraction circles, and fraction cards. Also available as hands-on manipulatives, these virtual tools provide students with an engaging platform to learn game rules and instructions on an interactive display. The WorkSpace contains game directions, along with visual cues, game boards, and recording sheets for students to record their game-playing activity—including their solutions and work—all in one convenient place. Do The Math Now! games extend learning with meaningful and scaffolded practice that facilitates strategic thinking with learned concepts and skills. |
| Educate students in the least restrictive environment consistent with their educational needs | Do The Math Now! includes processes and materials that scientifically-based research has shown to be effective in increasing academic achievement. The program, which reflects National Council of Mathematics (NCTM) standards, teaches essential Multiplication, Division, and Fraction math skills that integrate with a core math curriculum. Step-by-step lessons help students develop understanding, learn skills, see relationships, and make connections. Lessons follow a Gradual Release model in order to prepare students for individual success. |
| | In Gradual Release pedagogy, the teacher maintains a level of responsibility during the first three phases to ensure that students have the mathematical understanding before releasing them to complete a task on their own. |
| | <u>Phase One</u> —The teacher models and records the mathematical representation on the board. |
| | <u>Phase Two</u> —The teacher models again, elicits responses from students, and records on the board. |
| | <u>Phase Three</u> —Students work in pairs to do the mathematics and the teacher records on the board. |
| | <u>Phase Four</u> —Students work independently, monitored and supported by the teacher. |
| | As with instruction, practice is carefully sequenced to move from concrete experience to pictorial representations to symbolic recording. Engaging games allow students to think strategically while reinforcing concepts and skills. The <i>WorkSpace</i> gives students an opportunity to record and explain their thinking numerically and in writing. |

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| Implement a multi-tiered strategy designed to provide increasingly intensive interventions to those students who are not making adequate progress in the Core Curriculum | Do The Math Now! builds whole number and fraction foundations, constructing a framework for learning that rebuilds students' cognitive structures for understanding mathematics. Instruction connects content with practice through direct instruction, meaningful practice, suggestions for differentiation, and strategically placed formative assessments. By spending time developing unifying ideas, students build deep understanding, learn to reason mathematically, make connections across operations, and apply their skills to higher-level mathematics—critical foundations for Algebra. Each Do The Math Now! Teaching Guide has five units divided into three sets of five lessons that are carefully sequenced to build upon each other. The first four lessons are instructional lessons that use the gradual release method—I Do, We Do, and You Do—to teach new concepts. Students practice new concepts for each lesson in the corresponding WorkSpace pages. Every fifth lesson is a Progress Monitoring lesson that allows students to demonstrate their understanding of the objectives in the previous four lessons. Teachers use the CheckPoint pages of the Teachers Guide to differentiate instruction and provide additional support, practice, and/or challenge after every five lessons. The CheckPoint pages support student with additional skills practice and review, extend learning and challenge students, and provide |
| | support with Additional Practice pages available in the <i>TeacherSpace</i> CD-ROM or SAM resources. |
| Provide ongoing progress monitoring of students' responses to high-quality, research-based intervention, and use it to guide the Individualized Education Plan (IEP) | Do The Math Now! includes both embedded progress monitoring and summative assessments that allow teachers to continuously evaluate student understanding and monitor their progress. Ongoing assessment is built into Do The Math Now! as students use their WorkSpace during each lesson to follow along with lessons and to practice learned concepts and skills on a daily basis. During every fifth lesson, on a weekly basis, students complete the Show What You Know WorkSpace assignment to demonstrate understanding of the math content from the previous four lessons. After students complete the Show What You Know assignment, teachers can formally assess understanding of skills and concepts from the previous four lessons. |
| | ProgressSpace assessments at the beginning and end of each unit and semester to assess understanding and monitor student progress over time. Beginning-of-Unit Assessments—Administered at the start of each |
| | Do The Math Now! unit to capture students' baseline scores and understanding of foundational math skills |
| | End-of-Unit Assessments — Administered at the end of each Do The Math Now! unit to enable teachers to track and monitor student progress over the course of 15 lessons |
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| Provide ongoing progress monitoring of students' responses to high-quality, research-based intervention, and use it to guide the Individualized Education Plan (IEP) Continued | Beginning-of-Semester Assessments — Both the Multiplication & Division and Fraction Fundamentals volumes include an assessment to capture students' baseline scores at the beginning of each school semester. Both volumes include two Beginning-of-Semester Assessments each. Ind-of-Semester Assessments — Administered at the end of each school's semesters, these assessments enable teachers to track and monitor student progress over the course of a semester. Both the Multiplication & Division and Fraction Fundamentals volumes include two End-of-Semester Assessments. All assessments in Do The Math Now! are administered in ProgressSpace, the online assessment and reporting component. With ProgressSpace, all curriculum embedded assessments are web-based and customized to meet students' needs. Three easy-to-generate, actionable reports and a student test printout allow teachers to evaluate student understanding and measure growth. The Student Progress Report shows growth at the individual student level; the Grading Report shows performance at a class, grade, or school level; |
| Include literacy instruction | and the Response to Intervention report displays program performance at the school or district level. Do The Math Now! allows for maximum access and success for English- |
| that targets English Language Learners who have not yet been identified as needing Special Education services | Language learners, with an emphasis on language development, the incorporation of visual representations and directions, and consistency across all instructional routines. Numerous structured opportunities for students to engage in meaningful conversations about math are embedded throughout the program to support intentional vocabulary and language development while increasing access to content. Vocabulary instruction is intentionally introduced after students experience the concept, helping students internalize the meaning of the word. Math vocabulary is explicitly taught using a consistent routine—students see, hear, say, and write the vocabulary word. Spanish translations are provided and cognates shown in italics. Language Development boxes point out the similarity of these words to their English equivalents or the multiple meanings of the English word in order to help Spanish-speaking students acquire vocabulary. Lessons integrate multiple visual representations of key math concepts. Visual directions in the student <i>WorkSpace</i> model problems for students who have difficulty reading in English. Student glossaries offer visual descriptions of vocabulary words. Translated into Spanish, they allow Spanish-speaking students to refer to the vocabulary independently. Visual representations of mathematical concepts are embedded throughout the program and are consistently used throughout student work. Hands-on materials help students build understanding and practice skills. |

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| Inform parents of General Education services that would be provided and strategies to support their child's rate of learning | Located on the <i>TeacherSpace</i> CD-ROM, the <i>Do The Math Now!</i> Community News reproducibles provide communication to parents and are also available in Spanish. Through this ongoing communication, parents are kept informed on the concepts and activities that have been presented in the classroom. The newsletter also includes suggested activities and practice games for students to try at home. In addition, teachers can share <i>WorkSpace</i> pages and assessment results with parents. |
| Provide a high-quality professional development plan to support teachers providing Special Education services, as well as those implementing RtI | This training helps teachers get started using the program in the classroom. Participants learn how to effectively use Do The Math Now! to meet the needs of struggling math students in Grades 6-10+, including understanding how the program structure builds foundational math skills and sequences the content to teach students to reason mathematically, teaching the instructional strategies and lessons, and using assessment data to influence instruction. Do The Math Now! Interactive Webinar In this interactive Webinar, teachers, coaches, and administrators learn how to use Do The Math Now! assessments, including using ProgressSpace, analyzing data to monitor progress and inform instruction, and understanding how to manage enrollment, customize settings, and access reports using SAM. In-Classroom Support—RECOMMENDED, at an additional cost Scholastic consultants provide teachers with individualized support and focused strategies side-by-side in the classroom. They build relationships with teachers to support on-model implementation, classroom management, program monitoring, and data-driven instruction. A year-long customized plan of in-classroom visits provides teachers with in-person, individualized support and focused strategies for the classroom. For the best results, Scholastic recommends monthly visits for all teachers. |
| Coordinate with activities funded by and carried out under the Elementary and Secondary Education Act (ESEA) | Do The Math Now! can be integrated with funds from state, local, private, and other sources. The federal funding programs for which it qualifies include: Title IA—Improving Basic Programs Title I—School Improvement Grants (SIG) Title I—Supplemental Education Services (SES) Title III—English Language Acquisition IDEA, Part B IDEA, Response to Intervention 21 st Century Community Learning Centers (21CCLC) Race to the Top—District (RTT-D) |