

# Progress in Mathematics

# **Logic Model**

**Problem Statement**: Research shows that proficiency in math skills and knowledge is key for both students' long-term success in math but also post-schooling outcomes. Students who do not acquire math proficiency in grades K–8 continue to struggle in later years as they lose pace with their grade-level peers. Research-based math interventions are necessary to support the acquisition of math skills and knowledge, but teachers often lack the adequate training and targeted resources to meet the learning needs of each student. Progress in Mathematics provides rigorous math content focused on building deep conceptual understanding and procedural fluency equally. With explicit in-depth instruction in fundamental mathematical concepts, the program emphasizes the development of higher order thinking skills, precision in computational fluency and math vocabulary, and is supported by an abundance of practice, thus helping develop mathematically proficient students.

# Inputs

What does Progress in Mathematics provide?:

#### W. H. Sadlier PROVIDES

- Complete, standards-aligned grades K-8 math program (print and e-book editions for students and teachers, student workbook) with resources that support:
- explicit, systematic instruction,
- conceptual understanding,
- fluency in numerical operations,
- problem solving,
- math conventions and terminology,
  and
- practice and review
- Instructional videos
- Embedded diagnostic, formative and summative assessments<sup>1</sup>
- Enrichment activities
- Digital and physical manipulatives
- Game-based learning components
- Teacher reproducible masters
- Professional development with embedded teacher support

#### **DISTRICT PROVIDES**

- Access to Progress in Mathematics resources including Sadlier Connect subscription
- Scheduling and support for professional development
- Support for teacher professional learning communities (PLCs

# **Participants**

Who uses Progress in Mathematics?

- K-8 educators
- K-8 students
- School and district administrators
- Families and guardians

# **Activities**

How are participants using Progress in Mathematics?

#### **EDUCATORS**

- Engage students in instructional, practice, problem-solving tasks
- Assign diagnostic, formative and summative assessments to determine students' learning needs
- Reteach concepts that need to be addressed based on assessment results
- Provide differentiated instruction and support for multilingual learners

#### **STUDENTS**

- Complete instructional and practice activities to build proficiency
- Use games and study aids to build fluency
- Complete diagnostic, formative and summative assessments to demonstrate proficiency
- Apply newly acquired math skills to demonstrate knowledge and understanding

#### **ADMINISTRATORS**

- Review school- or district-level progress
- Support teachers with professional development and/or coaching

## **FAMILIES**

Support students with at-home learning support

# **Outputs**

What are the measurable results of implementing Progress in Mathematics?

### **EDUCATORS**

- Number/type of:
- · instructional sessions delivered
- practice activities assigned
- games and study aids assigned
- assessments assigned
- Number of professional development activities completed
- Usage of digital resources on the SadlierConnect platform

#### **STUDENTS**

- Number/type of:
- instructional practice completed
- practice activities completed
- games and study aids used
- assessments completed
- Usage of digital resources on the SadlierConnect platform

## **ADMINISTRATORS**

- Number of reports reviewed
- Usage of digital resources on the SadlierConnect platform

#### **FAMILIES**

Usage of digital resources on the SadlierConnect platform

# **Outcomes**

What are the expected changes or impacts of using Progress in Mathematics?

## **SHORT-TERM**

#### **Educators**

- are empowered with resources to plan day-to-day instruction,
- have access to activities that help them support differentiated practice, including support for multilingual learners, and
- have access to data that support 1:1, small group, and whole class instruction

#### **Students**

- have access to a curriculum that meets their specific learning needs,
- are more engaged and motivated to learn K-8 math concepts, and
- have access to and are motivated to practice activities that help them become proficient in math skills and knowledge

Administrators are empowered with data to support fidelity of implementation Families/Guardians are informed about children's progress on K-8 math concepts and have access to resources to support learning

# **INTERMEDIATE**

#### **Educators**

- develop greater capacity to support students based on their individual needs and progress.
- develop greater capacity to use student data to inform classroom instruction, and
- have more time to plan lessons and differentiate instruction.

# Students'

- math conceptual understanding of K-8 math concepts improves,
- understanding of K-8 math concepts as measured by standardized assessments improves, and
- math fact fluency improves.

Administrators develop greater capacity to support educators with the data Families/Guardians develop greater capacity to provide additional math learning opportunities and support to children

# LONG-TERM

- Students have increased confidence and persistence with learning math.
- Students have improved self-efficacy as math learners.
- Achievement gaps in students' math outcomes, especially among students from historically underserved backgrounds, are narrowed.
- Students are better prepared for high school and college-level math courses.



1 Beginning-, mid-, and end-of-year tests, chapter pre- and post-tests, progress checks, cumulative reviews, domain tests, and performance tasks