




Scholastic Math Inventory


Aligns to Title I, Section 1003(g)


SCHOOL IMPROVEMENT GRANTS

School Improvement Grants (SIG) are intended to help Title I schools, identified for improvement, corrective action, or restructure, implement reform strategies, specifically the four intervention models—Turnaround, Restart, School Closure, or Transformation Model. Within the Turnaround and Transformation Models, districts and schools are required to implement a series of required activities, as well as other optional elements. The chart below shows how *Scholastic Math Inventory* can support School Improvement, specifically for Turnaround and Transformation Models. The criteria are drawn from the Federal Title I, Section 1003(g) Guidance posted at: <http://www2.ed.gov/programs/sif/legislation.html>.

SIG Requirements	<i>Scholastic Math Inventory</i>
Implement an instructional program that is research-based	<p><i>Scholastic Math Inventory</i> (SMI) College & Career is an adaptive assessment that measures math achievement and growth from Kindergarten to Algebra II. Utilizing the Quantile Framework® for Mathematics, SMI College & Career provides educators with actionable data about students’ skills as a Quantile® measure, a score that describes the students’ readiness for instruction. This assessment provides screeners for early numeracy and basic fact fluency that identify struggling students early, and provides skills-based instructional and placement recommendations with immediate results available at the conclusion of each assessment.</p> <p>The development of SMI was informed through leadership of organizations that include the National Math Panel, the National Council of Teachers of Mathematics, and the Common Core State Standards Initiative. SMI College & Career was developed during 2008–2010 and launched in the summer of 2010. Studies of SMI validity began in 2009. For a more robust validity analysis, Phase II of the SMI validation study was conducted during the 2009–2010 school year. Phase III of the validity study was completed in 2012 with data collected from the 2010–2011 school year. SMI was awarded the highest rating for validity and reliability by the National Center for Response to Intervention.</p> <p> For additional information regarding the research foundations and efficacy of <i>Scholastic Math Inventory</i> please see: http://teacher.scholastic.com/math-assessment/scholastic-math-inventory/research.html</p>
Implement an instructional program that is aligned with State academic standards	<p>The Quantile Framework® is the backbone on which the mathematical skills and concepts assessed in SMI are mapped. The Quantile Framework® consists of a common metric—the Quantile—that is employed to scientifically measure a student’s readiness for mathematics instruction. With SMI College & Career, teachers are provided with a growth measure for their students that help them determine if students are tracking to grade-level proficiency, and Algebra—the gateway to college and career readiness.</p> <p>SMI College & Career begins with the concept of targeted level testing and makes a direct link with those measures to instruction. With the Quantile Framework for Mathematics as the yardstick of skill difficulty, SMI produces a measure that places skills, concepts, and students on the same scale.</p>

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SIG Requirements	Scholastic Math Inventory
<p>Implement an instructional program that is aligned with State academic standards <i>Continued</i></p>	<p>The Quantile measure connects each student to mathematical resources—Knowledge Clusters, specific State Standards and the Common Core State Standards for Mathematics, widely adopted basal textbooks, supplemental math materials, and math intervention programs.</p> <p>The Common Core State Standards cite Algebra as the gateway to college and career readiness. SMI College & Career monitors students’ performances up to Algebra Readiness, which is measured at 1030Q on the Quantile Framework. Students achieving in the Proficient Performance Standard in SMI are on the path to receive Algebra I instruction by Grade 9. Students achieving in the Advanced Performance Standard are on the path to receive Algebra I instruction by Grade 8. Students achieving in the Basic and Below Basic Performance Standards require an intensive intervention in order to be successful in secondary mathematics coursework.</p> <p> For information about how <i>Scholastic Math Inventory</i> correlates to State Standards, please see: http://teacher.scholastic.com/math-assessment/scholastic-math-inventory/core-alignment.html</p>
<p>Integrate technology-based supports and interventions as part of the instructional program</p>	<p>When students are assessed in SMI College & Career, they receive a single measure—a Quantile® measure—that indicates their instructional readiness for calibrated content to and through Algebra I. As a computer-adaptive test, SMI College & Career provides items based on students’ previous responses. This format allows students to be tested on a large range of skills and concepts in shorter amount of time and yields a highly accurate score. SMI College & Career can be completed in about 20-40 minutes and presents in three parts:</p> <ol style="list-style-type: none"> 1. The Math Fact Screener is a simple and fast test focused on basic addition and multiplication skills. 2. The Practice Test is a 3-5 question test calibrated far below the students’ current grade level. The purpose of this test is to ensure students can interact with a computer test successfully and to give them an opportunity to practice with the tools provided in the assessment. 3. The Scored Test produces a Quantile measure for the student. In this section, students engage in about 25 test items that follow a consistent four-option, multiple-choice format. Items at the lowest level are sampled from Kindergarten and Grade 1 mathematical skills and topics; items at the highest levels are sampled from Geometry and Algebra II topics. The test bank of over 5,000 items and adaptive algorithm ensure that students never receive the same test items twice, providing a highly individualized adaptive testing experience. <p>Because the assessment results are individualized, teachers can accurately place each student in instructional materials. This accurate student placement increases student success and instructional effectiveness.</p>

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<p>Use formative, interim, and summative assessments to inform and differentiate instruction</p>	<p>SMI College & Career is a formative assessment that can be used for universal screening, progress monitoring and informing instruction. After an initial assessment on SMI College & Career, it is possible to monitor progress, predict the student’s likelihood of success when instructed on mathematical skills and concepts, and report on actual student growth toward the objective of Algebra completion and, by extension, college and career readiness.</p> <p>Students’ Quantile measures indicate their readiness for instruction on skills and concepts within a range of 50Q above and below their Quantile measure. Students should be successful at independent practice with skills and concepts that are about 150Q to 250Q below their Quantile measure. With SMI College & Career test results educators can choose materials and resources for targeted instruction and practice.</p> <p>On a school-wide or instructional level, the computer-adaptive SMI College & Career results can be used to screen for intervention and acceleration, measure progress at benchmarking intervals, group students for differentiated instruction, provide an indication of outcomes on summative assessments, provide an independent measure of success, and inform district decision-making.</p>
<p>Promote the continuous use of data in order to meet the diverse academic needs of individual students</p>	<p>SMI College & Career manages data and reports in the <i>Scholastic Achievement Manager</i> (SAM), the data backbone for all Quantile-based Scholastic Math programs and Lexile-based reading programs. SAM, in addition to automatically scoring and analyzing student performance data, provides educators with these 9 reports that support universal screening, instructional placement, progress monitoring, and AYP reporting needs.</p> <ul style="list-style-type: none"> ▪ The Performance Level Growth Report outlines change over time by district, school, grade, and classroom. ▪ The Test Activity Report shows usage data. ▪ The Growth Summary Report depicts student growth by school, grade, and class. ▪ The Intervention Grouping Report groups students by performance levels, reports Quantile levels, and provides instructional recommendations. ▪ The Growth Report measures Quantiles between any two administrations ▪ The Incomplete Test Report shows who did not complete the SMI assessment. ▪ The Student Test Printout shows item-by-item performance for the most recent test. ▪ The Student Progress Report shows an individual’s test history in table and line graph formats. ▪ The School-to-Home Report shows Quantile measure and performance levels. <p> For more information about SAM including links to see sample reports, visit this site: http://teacher.scholastic.com/products/sam/</p>
<p>Implement a school wide <i>Response to Intervention</i> model</p>	<p>SMI College & Career makes The Quantile Framework actionable. With Quantile measures for students and explicit instructional recommendations, SMI College & Career provides clear information about the math skills and concepts students are ready to learn. It also identifies the foundational skills that teachers may need to rebuild. SMI College & Career supports RTI implementation with placement and benchmarking on all levels of instruction and bolsters Tier I instruction with the power to differentiate.</p>

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Implement a school wide <i>Response to Intervention</i> model <i>Continued</i>	SMI College & Career also supports RTI implementation by providing a clear identification of students in need of service. The norm-referenced and criterion-referenced reports with personalized instructional recommendations support teachers with the most challenged math learners. RTI implementation is enhanced by SMI College & Career tools which can be used to determine if interventions are succeeding. Growth reports for individual students and cohorts of students can help educators make appropriate placement decisions.
Implement effective strategies to ensure that students with disabilities and LEP students acquire language skills to master academic content	<p>SMI College & Career is a fast, time- and cost-efficient tool for math educators. This assessment simplifies the data process by using technology to gather, organize, and analyze student performances. With SMI College & Career, educators receive real-time results to make informed, timely, and appropriate decisions for all students’ instructional needs, including the needs of English Language Learners and students with disabilities. Clear, meaningful reports are available immediately and provide actionable data to evaluate progress toward proficiency goals, identify situations that call for intervention, and track growth over time.</p> <p>Students log in to SMI with unique usernames that identify their grade and estimated performance level. Students complete the assessment with about 25-30 test items, or within 40 minutes. SMI’s computer adaptive algorithm applies this information to select grade appropriate content according to the recommendations of NCTM and then adjusts the difficulty level of each item presented according to student responses throughout the assessment. This algorithm pinpoints students’ level of mathematical achievement. Over 5,000 items included in the test bank and advanced data collection technology ensure that students never receive the same test items twice and provide a highly individualized adaptive testing experience.</p>
Establishing schedules and strategies that provide increased learning time	<p>The Quantile Framework® provides a common measure, the Quantile, for measuring students’ understanding of mathematical concepts and skills at his or her grade level. The same scale is applied to the materials used in instruction so teachers can use Quantiles to identify students with mathematical needs, inform and differentiate instruction, and forecast the level of achievement a student is likely to experience.</p> <p>SMI College & Career generates criterion- and norm-referenced results for each student, including a percentile rank, stanine, normal curve equivalent (NCE), grade-level standard, performance standard, and native Lexile® measure. The test’s level of difficulty automatically adjusts in response to students’ answers, resulting in fast, accurate assessment with no “test burnout” for students. SMI College & Career uses the developmental Quantile scale ranging from Emerging Mathematics (EM) for scores below 0, to above 1250Q for pre-Algebra math learners.</p>
Providing ongoing mechanisms for family and community engagement	SMI College & Career includes a School-to-Home report which provides information for parents about student progress and instructional recommendations. Teachers can send these reports home with students or use them during parent-teacher conferences.

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<p>Provide staff with ongoing, high-quality job-embedded professional development that is aligned with the school's comprehensive instructional program</p>	<p><u>SMI Implementation Training (Half or Full Day)</u> RECOMMENDED—At an additional cost This training for teachers, coaches, and administrators provides an overview of the Quantile Framework® for Mathematics, hands-on experience with the software and management system, and practice using Quantile measures to differentiate instruction. Participants learn how to analyze reports to plan instruction and benchmark progress.</p> <p><u>SMI Interactive Webinar (2 Hours)</u> RECOMMENDED—At an additional cost This interactive Webinar helps teachers, coaches, and administrators understand and use the Quantile Framework® for Mathematics. It provides the tools to successfully administer the SMI assessment and enables participants to use reports to screen for intervention, differentiate instruction, and benchmark progress.</p>
<p>Conduct periodic reviews to ensure that the curriculum is being implemented with fidelity, and is having the intended impact on student achievement</p>	<p><u>In-Classroom Support & Coaching</u> RECOMMENDED—At an additional cost Scholastic offers a yearlong customized plan of in-classroom visits that provides teachers with in-person, individualized support and focused strategies for the classroom. Based upon the Teacher Self-Assessment Form, Scholastic Consultants provide teachers with individualized support and focused strategies side-by-side in the classroom. Our consultants will build relationships with teachers to support on-model implementation, classroom management, program monitoring, and data-driven instruction.</p> <p><u>Data Analytics Services</u> RECOMMENDED—At an additional cost Scholastic will partner with the district to collect and analyze data from the district level down to the individual classroom, and present customized reports and graphs, as needed, to determine next steps. Scholastic experts can help the district to:</p> <ul style="list-style-type: none"> ▪ Use program data to evaluate implementation and make changes for program efficiency and return on instruction investment ▪ Compare and analyze district, school, and classroom growth data and targets ▪ Identify district- or school-level trends and quickly “drill down” to pinpoint specific concerns ▪ Use data for short- and long-range planning for teachers, classrooms, schools, and the district <p>Scholastic Implementation Experts provide the district with feedback on how to improve the implementation of SMI College & Career or other Scholastic programs in the district. Quarterly Implementation Effectiveness Reports include:</p> <ul style="list-style-type: none"> ▪ Implementation indicators at the class, school, and district levels ▪ Actionable data and recommendations for school and district leaders ▪ Data presentations, as needed

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<p>Develop and increase teacher and school leader effectiveness</p>	<p>To improve student achievement, districts need to have a clear vision for teaching and learning, a firm understanding of priorities, and a defined path to accomplish goals. The <i>Scholastic Achievement Partners (SAP)</i> team of proven leadership and instructional specialists can partner with school leaders to help develop and implement an actionable plan for school improvement.</p> <p>SAP services include the following:</p> <p><u>Comprehensive Needs Assessment</u>—During this data-driven planning process, SAP consultants work with school leadership teams to identify the strengths and challenges of a district or school. Working together, goals are established, and measurements to assess implementation are defined. The Needs Assessment includes interviews, focus group discussions, presentations, and a final report.</p> <p><u>Data Analysis Reporting (DAR)</u>—The Data Analysis Report (DAR) is a longitudinal report that provides an in-depth review of a school or district’s performance measures over the course of the past three years. The data profile provides quantitative evidence of student academic data, demographic information, college readiness indicators, and school characteristics to help identify strengths and areas of need and serves as a starting point for comprehensive school improvement.</p> <p><u>Leadership Institute</u>—SAP can tailor an intensive Leadership Institute that quickly and effectively builds the leadership density of the academic team. Ideal for districts with new leadership or within a district under rapid change, these institutes are delivered over consecutive days and typically held during the summer of scheduled in-service days. The topics are customized to meet the specific needs of the leadership team.</p> <p><u>Foundations of Organizational Leadership</u>—These one-day courses focus on building leadership capacity. Topics include Establishing Structures, Communicating a Shared Vision, Creating a Culture of High Academic Expectations, Using System wide Data, Leading Change, Developing and Implementing Rigor and Relevance, as well as Leading Professional Dialogue.</p> <p><u>Foundations of Effective Instruction</u>—These one-day courses focus on building and sustaining teacher effectiveness. Topics include Creating a Rigorous and Relevant Learning Environment, Applying Rigorous and Relevant Instructional Strategies, Using Data to Inform Instruction, and Collaborating for Continuous Professional Learning.</p> <p><u>Leadership Coaching</u>—Highly customized, on-site support with an executive coach helps build leadership capacity through side-by-side, collaborative sessions that guide and support leaders.</p> <p><u>Job-Embedded Instructional Coaching</u>—Results-oriented and holistic in approach, job-embedded instructional coaching supports teachers in meeting the needs of every student by building their skills in learner engagement, academic rigor, and real world relevance. Coaches work with teachers during the regular school day in their classrooms and during planning periods to raise student achievement.</p> <p> For additional information regarding SAP services, please see: http://teacher.scholastic.com/products/scholastic-achievement-partners/#/our-services-section.</p>