

## District and School-site Mathematics Implementation Rubric

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#### **CORE Mission**

CORE serves as a trusted advisor at all levels of preK-12 education, working collaboratively with educators to support literacy and math achievement growth for all students through leadership, instructional and system improvements.

Our implementation support services and products help our customers build their own capacity for effective instruction by laying a foundation of research-based knowledge, supporting the use of proven tools, and developing leadership.

As an organization committed to integrity, excellence, and service, we believe that with informed school and district administrators, expert teaching, and well-implemented programs, all students can become proficient academically.



This rubric was developed to assist teachers and administrators in effectively implementing a research-based mathematics instructional program. The criteria attached are consistent with the *Report of the National Mathematics Advisory Panel* (2008), the Common Core State Standards, and the Every Student Succeeds Act.

District and school leaders play a vital role in making the structural and instructional changes necessary to ensure that all students will read and write well and become mathematically proficient. It is not enough that teachers are trained; school systems must significantly alter the ways they provide ongoing support and organize and conduct the teaching of mathematics in all grades. Now more than at any time, perhaps, districts and schools will be under close scrutiny in the implementation of state program requirements, rigorous state standards, or the Common Core State Standards. Large sums of money have been invested in professional development, but unless administrators and teachers are diligent and relentless in the pursuit of excellence in teaching, much of the money may be wasted. This rubric is intended to serve as a roadmap to assist superintendents, district and site administrators, and others responsible for mathematics leadership as well as classroom teachers to understand the elements that must be in place for full and successful implementation leading to high student achievement. At the elementary level, coherent, effective mathematics programs are essential to prevent failure; at the upper grades and secondary level, systemic change is essential to allow for restructured time and targeted instruction for those students who are already struggling. The changes needed require reorganization and a renewed commitment to ensure that all students graduate with proficiency in reading, writing, and mathematics.

In addition to this rubric for assessing the state of mathematics implementation, a separate scale for assessing leadership and organizational capacity is part of this rubric. This rubric is not to be used for teacher evaluation; rather, it is a continuous improvement document that should be used for support and growth.

#### **Ratings:**

- 4 represents full implementation and strong evidence of the component.
- 3 indicates implementation is evident but not consistent.
- 2 indicates the components are evident in a limited way.
- 1 indicates poor implementation and limited evidence.

This rubric is to be completed by all schools within a district system or all teachers of math within a school site.

It is recommended that this is completed 3 times during the year: fall, winter, spring. A process is to highlight the descriptors under each category and see where the majority of highlights fall in that category to set the score. The goal is to move toward 4.



## **Criterion 1: Organizational Leadership**

The central office leadership communicates a clear mathematics instructional vision, owns the mathematics work, makes data-based decisions, uses a distributed leadership model, and holds all leadership accountable for results based on scientific principles and practices.

	4	3	2	1
a.	The superintendent and/or site leadership clearly champions and promotes the need and expectation for a coherent mathematics approach based on proven practices.	The leadership articulates a vision for a mathematics approach.	The leadership allows each site to determine its mathematics vision.	Mathematics is not a focus.
b.	The leadership clearly communicates the expectations for the full implementation of a systematic mathematics program, included tiered interventions.	The leadership supports implementation of a core curriculum.	The leadership allows each site to determine the degree of implementation of a mathematics core program.	A coherent mathematics core program is neither selected nor implemented districtwide but is left up to individual schools.
c.	The leadership sets the expectation that principals are held accountable for fully implementing the curriculum.	Principals are expected to be instructional leaders.	Principals are given limited direction.	Principals have no district guidance.
d.	The leadership establishes a distributed leadership model.	The leadership controls many decisions but shares some decision-making.	Most decisions are made by teachers with little leadership involvement.	It is unclear how decisions are made.
e.	The leadership devolves decision-making based on achievement of results. Schools/teachers with poor results are monitored frequently and have less autonomy of decision-making, schools/teachers with mixed results collaborate with leadership on decisions related to teaching	Autonomy in decision- making is sometimes based on achievement results.	Autonomy in decision- making is not based on results.	Sites and teachers have complete autonomy regardless of their achievement results.



4	3	2	1
and learning, and schools/teachers that achieve benchmark targets regularly have greater autonomy of decision-making.			
f. The leadership spearheads and prioritizes data study sessions and plans appropriate actions based on the data.	The leadership occasionally spearheads and prioritizes data study.	The leadership leaves data study to the site or teachers' discretion with limited evidence of advance planning.	The leadership does not establish data study as a priority nor use it to set goals.
demonstrate the ability to lead others. From the district and/or school site mathematics staff downward, all are knowledgeable, prepared, and capable of leading.	From the district and/or school site mathematics staff downward, some are knowledgeable, prepared, and capable of leading.	Few administrators at district or site are knowledgeable, prepared, and capable of leading.	District or site leadership is not prepared.
h. Leadership regularly conducts learning walks in all classrooms and regularly provides individual and group feedback.	Leadership regularly conducts learning walks in most classrooms but doesn't always provide feedback to teachers.	Leadership conducts learning walks haphazardly and rarely, if ever, provides feedback to teachers. regularly provides individual and group feedback.	Leadership rarely conducts learning walks.

Criterion 1 overall rating = total points / 8 =\_\_\_\_\_\_\_ Add up total points and divide by 8 (the number of categories in this criterion).



## Criterion 7: Selection of a High-Quality Mathematics Curriculum for Elementary and Middle Schools

The district/school has identified and selected a research-based curriculum program with evidence of success for the largest possible number of students. The selected program will have systematic and explicit instruction in mathematics.

	4	3	2	1
	The program fully provides the required coverage and emphasis as directed by approved standards used by the school or district.	The program mostly provides the required coverage and emphasis as directed by approved standards used by the school or district.	The program somewhat provides the required coverage and emphasis as directed by approved standards.	The program is not at all aligned with the required coverage and emphasis as directed by approved standards.
a	The program emphasizes systematic instruction needed to build number sense and fluency with whole numbers (K–8), rational numbers (3–8), integers (6–8), and irrational numbers (7–8).	Some systematic instruction to build number sense and fluency is evident.	The program is almost entirely based on building conceptual understanding. Fluency with facts and procedures is implicit rather than explicit.	The program is primarily based on memorization of facts and procedures. Building conceptual understanding is implicit rather than explicit.
b	The program lays a foundation for algebra through an understanding of properties that is connected and consistent across operations with whole, rational, and irrational numbers; integers; and algebraic expressions.	Some connections to and understanding of mathematical properties are evident.	Some connections to and understanding of mathematical properties are evident but not explicit.	The program does not build a foundation for algebra through an understanding of math properties and relationships.
C	The program includes required material for measurement, geometry, statistics, and probability.	The program includes most of what is required in measurement, geometry, statistics, and probability.	The program includes some of what is required in measurement, geometry, statistics, and probability.	The program does not address measurement, geometry, statistics or probability.



	4	3	2	1
d.	Grades K–2 components include an emphasis on place value, counting strategies, number facts, investigations into number relationships, and learning about properties of operations.	Grades K–2 components include some emphasis on all of the elements listed in column 4.	Grades K–2 components include some emphasis on most but not all of the elements listed in column 4.	Grades K–2 components include some emphasis on some of the elements listed in column 4.
e.	Grades 3–5 components include teaching through a progression arriving at understanding of and fluency with standard algorithms for operations with whole numbers, decimals, and fractions, and learning about properties of operations.	Grades 3–5 components include some emphasis on all of the elements listed in column 4.	Grades 3–5 components include some emphasis on most but not all of the elements listed in column 4.	Grades 3–5 components include some emphasis on some of the elements listed in column 4.
f.	Grades 6–8 components emphasize understanding and fluency with rational and irrational numbers, properties of operations, proportional reasoning, and solving equations.	Grades 6–8 components include some emphasis on all of the elements listed in column 4.	Grades 6–8 components include some emphasis on most but not all of the elements listed in column 4.	Grades 6–8 components include some emphasis on some of the elements listed in column 4.
g.	The program emphasizes mathematical proficiency, which includes conceptual understanding, fluency with facts and procedures, mathematical reasoning, oral and written communication of mathematical thinking, and problemsolving.	Most, but not all, areas of mathematical proficiency are consistently evident in the program.	Some areas of mathematical proficiency are consistently evident in the program (such as fluency, conceptual understanding, and/or problem-solving).	Only one or two areas of mathematical proficiency are consistently evident in the program (such as fluency or conceptual understanding).



	4	3	2	1
h.	Program components include systematic and explicit instruction, problemsolving, and investigative tasks. The program directs instruction to make connections between facts, procedures, and concepts explicit.	Program components include on a regular basis most but not all of the items described in column 4.	Program components include on an occasional basis the items described in column 4.	Program components include on an occasional basis some, but not all, of the items described in column 4.
i.	Program components regularly include problems that challenge students to think independently; analyze, synthesize, and extend knowledge; complete mental math tasks; and explain their reasoning.	Many tasks requiring higher- order thinking are included.	Some tasks requiring higher-order thinking from students are included.	Few tasks requiring higher- order thinking from students are included.
j.	The program components require students to explain (K–3) and increasing justify (4–8) with sound mathematical reasoning their thinking, methods, and solutions.	Tasks require students to explain and justify, but not with increasing rigor.	Some tasks requiring students to explain and/or justify are included.	Few tasks requiring students to explain and/or justify are included.
k.	The program materials provide ample massed and distributed practice leading to mastery.	Ample massed practice and limited distributed practice materials are available.	Minimal massed and distributed practice materials are available.	Minimal massed and no distributed practice materials are available.
l.	The program develops concepts from concrete (including manipulatives) to visual to abstract representations, and connections between representations are made explicit.	Concepts are developed from the concrete to the abstract and include some instruction about the connections between these.	Concrete and visual representations may often be used, but connections to the abstract are not explicit in the materials.	Concrete and visual representations are rarely used and/or connections to the abstract are not explicit in the materials.



	4	3	2	1
m.	In all grades, materials to develop and use vocabulary, language, and communication skills with math are explicit and systematic.	Materials to develop vocabulary, language, and communication are explicit and somewhat systematic.	There are few directions or materials to develop vocabulary, language, and communication.	There are no directions or materials to develop vocabulary, language, and communication.
n.	Assessment components include diagnostic tests, and unit, concept, and skill tests to monitor learning.	Most assessment materials described in column 4 are included in the program.	Assessment data is collected but not used to inform instruction.	Assessment, if it exists, is not research based and is of limited use.
0.	Guidance is provided in the use and interpretation of the assessments.	Some guidance in the use and interpretation of the assessments is provided.	Little guidance in the use and interpretation of the assessments is provided.	No guidance in the use and interpretation of the assessments is provided.
p.	Clear direction is provided in organization, pacing, scheduling, and use of the materials, including critical routines.	Directions for organization, pacing, scheduling, and routines are evident but limited.	Directions for organizing, pacing, scheduling and routines are not clear and are limited.	No direction in organization, pacing, scheduling, or component use is provided.
q.	Clear guidelines and materials are provided to differentiate instruction (reteaching, preteaching, and intervention) and meet the needs of benchmark, strategic, and intensive students as well as advanced learners, English learners, and special education students.	Some direction and materials to differentiate instruction are provided.	Little direction or materials to differentiate instruction are provided.	No direction or materials to differentiate instruction are provided

Criterion 7 overall rating = total points / 17 = \_\_\_\_\_ Add up total points and divide by 17 (the number of categories in this criterion).



## **Criterion 8: Selection of a High-Quality Curriculum for High School Mathematics**

The school has identified and selected a research-based curriculum program with evidence of success for the largest possible number of students. The selected program will have systematic and explicit instruction in mathematics.

	4	3	2	1
a.	The program emphasizes systematic instruction to build algebraic reasoning and fluency with equations, inequalities, and functions (linear, quadratic, exponential, and trigonometric).	Some systematic instruction to build algebraic reasoning and fluency is evident in all topics listed.	The program is almost entirely based on building conceptual understanding. Fluency with facts and procedures is implicit rather than explicit.	The program is primarily based on memorization of math facts and procedures.  Conceptual understanding and reasoning are implicit rather than explicit.
<b>b.</b>	The program develops understanding and fluency with geometric transformations, proof, and constructions; trigonometry; statistics; and probability.	The program covers all topics listed in column 4 but does not develop both fluency and understanding in all topics.	The program does not develop both fluency and understanding in most of the topics listed in column 4.	The program does not develop both fluency and understanding with any of the topics listed column 4.
c.	The program emphasizes modeling with mathematics at all levels.	Mathematical modeling is included, but proficiency is not emphasized.	Mathematical modeling is not consistently included in each topic.	Mathematical modeling is included in only a few topics.
d.	The program emphasizes mathematical proficiency, which includes conceptual understanding, fluency with facts and procedures, mathematical reasoning, oral and written communication of mathematical thinking, and problemsolving.	Most, but not all, areas of mathematical proficiency are consistently evident in the program.	Some areas of mathematical proficiency are consistently evident in the program (such as fluency, conceptual understanding, and/or problem-solving).	Only one or two areas of mathematical proficiency are consistently evident in the program (such as fluency or conceptual understanding).



	4	3	2	1
e.	The program components require students to explain and justify with sound mathematical reasoning their thinking, methods, and solutions.	Some tasks require students to explain and justify with sound mathematical reasons, but not daily.	Few tasks require students to explain and justify with sound mathematical reasons.	Almost no tasks require students to explain and justify with sound mathematical reasons.
f.	Program components include systematic and explicit instruction as well as problem-solving and investigative tasks. The program directs instruction to make connections between facts, procedures, and concepts explicit.	Program components include on a regular basis most but not all of the items described in column 4.	Program components include on an occasional basis all of the items described in column 4.	Program components include on an occasional basis some, but not all, of the items described in column 4.
g.	Program components regularly include problems that challenge students to think independently and analyze, synthesize, and extend math knowledge.	Many tasks requiring higher-order thinking from students are included.	Some tasks requiring higher- order thinking from students are included.	Few tasks requiring higher order thinking from students are included.
h.	The program materials provide ample massed and distributed practice leading to mastery.	Ample massed practice and limited distributed practice materials are available.	Minimal massed and distributed practice materials are available.	Minimal massed and no distributed practice materials are available.
i.	In all grades, materials to develop and use vocabulary, language, and communication skills with math are explicit and systematic	Materials to develop vocabulary, language, and communication are explicit and somewhat systematic.	There are few directions or materials to develop vocabulary, language, and communication	There are no directions or materials to develop vocabulary, language, and communication.
j.	Assessment components include diagnostic tests and unit, concept, and skill tests to monitor implementation.	Most assessment materials described in column 4 are included in the program.	Assessment data is collected but not used to inform instruction.	Assessment, if it exists, is not research based and is of limited use.



	4	3	2	1
k	Guidance is provided in the use and interpretation of the assessments.	Some guidance in the use and interpretation of the assessments is provided.	Little guidance in the use and interpretation of the assessments is provided.	No guidance in the use and interpretation of the assessments is provided.
1.	Clear direction is provided in organization, pacing, scheduling, and use of the materials, including critical routines.	Directions for organization, pacing, scheduling, and routines are evident but limited.	Directions for organizing, pacing, scheduling and routines are not clear and are limited.	No direction in organization, pacing, scheduling, or component use is provided.
m	Clear guidelines and materials are provided to differentiate instruction (reteaching, preteaching, and intervention) and meet the needs of benchmark, strategic, and intensive students as well as advanced learners, English learners, and special education students.	Some direction and materials to differentiate instruction are provided.	Little direction or materials to differentiate instruction are provided.	No direction or materials to differentiate instruction are provided.

Criterion 8 overall rating = total points / 13 =
Add up total points and divide by 13 (the number of categories in this criterion).



## Criterion 9: Selection of a High-Quality Intervention Curriculum for Mathematics

The school has identified and selected an intervention program that is research based for the weakest students in math; includes explicit instruction in work with whole numbers (K–5), rational numbers (4–9), proportional reasoning (7–10), and algebraic reasoning (9–12); has sufficient practice; and provides for active learning. The program selected for regular mathematics classrooms includes best-practice strategies and sufficient materials for extra support for less able students.

	4	3	2	1
8	The program focus is on whole numbers in grades K–5, rational numbers in grades 4–9, proportional reasoning in grades 7–10, and algebraic reasoning in grades 9–12.	The program includes some focus on the topics listed by grade bands in column 4.	Few intervention materials exist.	No formal intervention program materials exist. Each teacher has his or her own program.
t	The program provides guidance for explicit and systematic instruction that includes models for problem-solving, verbalization of thought processes, guided practice, corrective feedback, and frequent cumulative review.	Some systematic guidance for explicit instruction is evident that includes the strategies listed in column 4.	Limited guidance for systematic instruction exists.	No guidance for a systematic instruction exists.
C	The program materials provide ample massed and distributed practice leading to mastery.	Ample massed practice and limited distributed practice materials are available.	Minimal massed and distributed practice materials are available.	Minimal massed and no distributed practice materials are available.
d	The program provides guidance for instruction on solving word problems that is based on underlying structures.	Some guidance for word problems that is based on the underlying structures exists.	Guidance for word problems is not based on the underlying structures.	No guidance for instruction on word problems exists.



	4	3	2	1
	The program provides guidance for instruction using concrete and visual representations and how to make explicit connections to abstract representations.	Concepts are developed from the concrete to the abstract, and they include some guidance about explicit connections.	Concrete and visual representations may often be used, but connections to the abstract are not explicit in the materials.	Concrete and visual representations are not used, or connections to the abstract are not explicit.
1	The program includes about 10 minutes per day of practice with retrieval of basic number facts.	The program includes regular (but not daily) practice with number facts.	The program overly focuses on number facts (much more than 10 minutes per day).	The program does not include regular practice with number facts.
ş	The program includes regular practice and development of number sense, including flexibility with numbers and mental math.	The program includes regular (but not daily) practice with building number sense.	The program includes some practice with building number sense.	The program does not include practice with building number sense
1	The program includes regular opportunities for students to grapple with math concepts; make comparisons; analyze, make and verify conjectures about patterns and number properties, and problem-solve.	The program provides some opportunities for students to grapple with the math.	The program provides few opportunities for students to grapple with the math.	The program provides no opportunities for students to grapple with the math.
j	In all grades, materials to develop and use vocabulary, language, and communication (oral and written) skills with math are explicit and systematic	Materials to develop vocabulary, language, and communication are explicit and somewhat systematic.	There are few directions or materials to develop vocabulary, language, and communication.	There are no directions or materials to develop vocabulary, language, and communication.



	4	3	2	1
j.	Assessment components include screening, placement, and diagnostic tests; and tests to monitor implementation.	Most assessment materials described in column 4 are included in the program.	Assessment data is collected but not used to inform instruction.	Assessment, if it exists, is not research based and is of limited use.
k	Guidance is provided in the use and interpretation of the assessments.	Some guidance in the use and interpretation of the assessments is provided.	Little guidance in the use and interpretation of the assessments is provided.	No guidance in the use and interpretation of the assessments is provided.
l.	Clear direction is provided in organization, pacing, scheduling, and use of the materials, including critical routines.	Directions for organization, pacing, scheduling, and routines are evident but limited.	Little direction is provided in the organization, pacing, scheduling, and use of materials.	No direction in organization, pacing, scheduling, or component use is provided.
m	Clear guidelines and materials are provided to differentiate instruction (reteaching, preteaching, and intervention) and meet the needs of benchmark, strategic, and intensive students as well as advanced learners, English learners, and special education students	Some information to differentiate instruction is provided.	Limited information is provided to differentiate instruction.	No information to differentiate instruction is provided.

Criterion 9 overall rating = total points / 13 = \_\_\_\_\_ Add up total points and divide by 13 (the number of categories in this criterion).



# Criterion 10: Full Implementation of a Comprehensive, Research-Based Mathematics Program for Core and Intervention Instruction in all grades.

Leadership ensures that the core and intervention mathematics programs are comprehensive and research based, with a high probability of effectiveness. All necessary materials are purchased and delivered to every classroom. Math teachers have implemented effective strategies with excellent materials. Professional development is funded and scheduled for all administrators, coaches, and teachers.

	4	3	2	1
a.	All teachers and administrators have had effective initial training on the use of the selected program and the research-based best practices for teaching math.	Some teachers and administrators have had effective initial training on the use of the selected program and research-based best practices for teaching math.	Teachers and administrators have had limited initial training on the use of the selected program.	Teachers and administrators have had, at most, a very brief introduction to the program.
b.	Ongoing staff development for teachers, administrators, and coaches focuses on foundational math concepts, pedagogical content knowledge, and use of the selected program.	Ongoing staff development for some focuses on foundational math concepts, pedagogical content knowledge, and use of the selected program.	Additional staff development is available, but only to some.	Additional staff development is not available.
c.	All teachers have ongoing support provided by coaches and mentors, and regularly see model lessons, receive coaching as needed, and receive constructive feedback.	Many teachers have ongoing support from coaches and mentors, and regularly see model lessons, receive coaching as needed, and receive constructive feedback.	Very few teachers have ongoing support provided by coaches and mentors or receive constructive feedback.	Few, if any, teachers have had the opportunity to receive assistance or support.
d.	Videos and on-line clips are available to support effective practice.	A limited number of videos and on- line clips are available to support effective practices.	Limited and/or out-of-date videos are available to support implementation.	No videos or on-line clips are available to support implementation.



	4	3	2	1
e.	Teachers are regularly afforded opportunities to visit teachers having success.	Teachers are occasionally afforded the opportunity to visit teachers having success.	Teachers are rarely afforded the opportunity to visit teachers having success.	Teachers are not afforded the opportunity to visit teachers having success.
f.	observing instruction, recognizes items described in column 4 in		The site principal has some of the items described in column 4 in place.	The principal is not familiar with the programs and does not observe classes (other than for formal evaluations).
g.			Only basic components of the program are provided.	
h.	All grades have at least 60 minutes for core math instruction per day.  Math learning time is protected.	Instructional time for the core program is about 60 min./day.	Instructional time for the core program is insufficient (less than 50 min./day).	Instructional time for the core program is less than 40 min./day or not protected
i.	A specialized intensive intervention block of at least 30–60 minutes per day is provided for all students significantly below grade level.  Intensive intervention time is similar to but slightly less than that described in column 4  Instructional time for intervention is insufficient.		No intensive intervention exists.	
j.	Added support time is provided to students in regular math classrooms who may need some extra support	Limited added time and support are provided to regular math students needing extra support	Added support for regular students needing extra support is not provided	No intervention in regular classes exists.
k.	Teachers are expected to implement the program and best practices fully as designed with clear guidance.	Teachers are expected to implement the program as best they can.	Teachers have the freedom to pick and choose elements of the program to implement.	Teachers are not expected to use the program in any coherent or consistent way.

Criterion 10 overall rating = total points / 11 = \_\_\_\_\_ Add up total points and divide by 11 (the number of categories in this criterion).



## Criterion 11: Delivery of Effective Math Instruction with Research-Based Teaching Techniques

Math teachers have implemented effective strategies to provide the best opportunity for all learners to succeed in Mathematics.

	4	3	2	1
a.	The adopted math program is implemented fully as designed with all lessons.	The adopted math program is implemented fully as designed with most lessons.	The adopted math program is implemented fully as designed with some lessons.	The adopted math program is implemented fully as designed with few, if any, lessons.
b.	All lessons focus on meaningful and rigorous content commensurate with standards.	Most lessons focus on meaningful and rigorous content commensurate with standards.	Some lessons focus on meaningful and rigorous content commensurate with standards.	Few, if any, lessons focus on meaningful and rigorous content commensurate with standards.
c.	All lessons or lesson sequences provide explicit instruction with clear learning objectives, connecting concepts within and across grade levels.	Most lessons or lesson sequences provide explicit instruction with clear learning objectives, connecting concepts within and across grade levels.	Some lessons or lesson sequences provide explicit instruction with clear learning objectives, connecting concepts within and across grade levels.	Few, if any, lessons or lesson sequences provide explicit instruction with clear learning objectives, connecting concepts within and across grade levels.
d.	Teachers regularly utilize guided and independent practice, and opportunities for focused investigations of math concepts.	Teachers usually utilize guided and independent practice, and/or opportunities for focused investigations of math concepts.	Teachers always utilize either guided and independent practice, or opportunities for focused investigations of math concepts.	Teachers rarely utilize guided and independent practice, or opportunities for focused investigations of math concepts.
e.	There are frequent checks for understanding, with appropriate adjustments made to instruction.	There are periodic checks for understanding with appropriate adjustments made to instruction.	There are occasional checks for understanding with appropriate adjustments made to instruction.	There are few, if any, checks for understanding with appropriate adjustments made to instruction.
f.	Instruction includes sufficient immediate and distributed practice.	Instruction includes sufficient immediate practice and some distributed practice.	Instruction includes sufficient immediate practice and little or no distributed practice.	Instruction includes insufficient immediate practice.



•	g.	Students are frequently required to reason about the math, and justify answers and processes.	Students are periodically required to reason about the math, and justify answers and processes.	Students are occasionally required to reason about the math, and justify answers and processes.	Students are rarely, if ever, required to reason about the math, and justify answers and processes.
]	h.	Students are frequently required to problem-solve, apply, and model with mathematics.	Students are periodically required to problem-solve, apply, and model with mathematics.	Students are occasionally required to problem-solve, apply, and model with mathematics.	Students are rarely, if ever, required to problem-solve, apply, and model with mathematics.
j	i.	All instruction fosters active and meaningful engagement focused on the learning objectives, utilizing multiple instructional techniques.	Most instruction fosters active and meaningful engagement focused on the learning objectives, utilizing multiple instructional techniques.	Some instruction fosters active and meaningful engagement focused on the learning objectives, utilizing multiple instructional techniques.	Little, if any, instruction fosters active and meaningful engagement focused on the learning objectives, utilizing multiple instructional techniques.
j	j.	A positive attitude toward math is encouraged daily.	A positive attitude toward math is encouraged most of the time.	A positive attitude toward math is encouraged some of the time.	A positive attitude toward math is encouraged infrequently, if ever.
]	k.	Support is provided on a regular basis to ensure all students are learning.	Support is occasionally provided periodically to ensure all students are learning.	Support is rarely provided to ensure all students are learning	Little or nor support is provided to ensure all students are learning
]	l.	A clear and coherent lesson plan with sufficient teacher preparation is used daily.	A clear and coherent lesson plan with sufficient teacher preparation is used on most days.	A clear and coherent lesson plan with sufficient teacher preparation is used periodically.	A clear and coherent lesson plan with sufficient teacher preparation is rarely, if ever, used.
]	m.	Seating is arranged in all classes to foster attentiveness, collaboration, and interaction.	Seating is arranged in most classes to foster attentiveness, collaboration, and interaction.	Seating is arranged in some classes to foster attentiveness, collaboration, and interaction.	Seating is arranged in few, if any, classes to foster attentiveness, collaboration, and interaction.

Criterion 11 overall rating = total points / 13 = \_\_\_\_\_ Add up total points and divide by 13 (the number of categories in this criterion).



### **Criterion 12: Creation of a Timeline**

The district/school develops and articulates a clear pacing schedule that maps the specific instructional units to the calendar. All teachers are expected to follow the pacing plan.

	4	3	2	1
a	The district/school has developed a clear timeline and pacing plan, mapping the program components to the instructional calendar.	The district/school has developed a partial timeline and pacing plan, mapping the program components to the instructional calendar.	The district/school has not developed a pacing plan.	No plan for pacing or timing has been developed. No focus on content coverage or curriculum mapping exists.
b	All teachers are expected to follow this timeline.	All teachers are generally expected to follow this timeline, but not all do.	Teachers are given the flexibility to deliver the program as they choose.	Teachers are completely independent and may or may not use the program.
c	Teachers can plan together and students can move freely from classroom to classroom and school to school because of a high degree of consistency of implementation.	Teachers can plan together if they are following the timeline, but they are not always in the same place.	Because teachers are often at various places in the program and common planning is difficult.	No common planning takes place and there is no attention to common pacing.



d.	Unit or theme assessments or content benchmark tests are tied to the timeline for periodic progress monitoring	Unit or theme assessments are tied to the timeline only in a general way.	Few assessments are tied to the timeline.	No assessments are tied to the timeline.
e.	Assessment data provides the information needed to adjust instruction and adjust the instructional pacing and timeline to ensure standard mastery and full implementation.	Assessment data provides some information to adjust instruction and adjust the instructional pacing and timeline.	Assessment data provides limited information to adjust timeline or pacing.	Assessment data is not used.
f.	Critical benchmark targets are set and tracked	Critical goals are set for each year but not necessarily tracked.	Goal statements are general and vague.	No clear grade-level goals exist.

Criterion 12 overall rating = total points / 6 =\_\_\_\_\_\_ Add up total points and divide by 6 (the number of categories in this criterion).



## **Criterion 13: Evaluation of Progress**

The teachers, administrators, and district leadership evaluate the effectiveness of the program implementation through regular progress monitoring, including classroom observations, pacing checks, and especially student assessment data analysis.

	4	3	2	1
a.	The district/school has a coherent and clear assessment system, including screening, progress monitoring (including CBM), diagnostic, and outcome measures, as well as placement tests.	The district/school assessment system is mostly used as designed.	Schools are using the district assessment plan as they wish.	There is no coherent district or school-wide assessment plan and no time to study data.
b.	CBM is used to track progress, particularly in a Response to Instruction (RtI) model.	CBM is used to track progress as needed.	Informal assessments are used.	Informal assessments are used on a limited basis
c.	Teachers have a timeline and explicit plan for testing, and they have been well trained in the use of the assessments.	Teachers have a timeline for some testing and have had some training in the use of the assessments.	Teachers have a timeline for some testing; however, they have had limited or no training in the use of assessments.	No timeline exists for planned assessment
d.	All teachers have been trained and understand how to informally assess students during instruction.	Most teachers generally understand how to informally assess students during instruction.	Some teachers understand how to informally assess students during instruction	Few, if any, teachers understand how to informally assess students during instruction.
e.	Unit/theme/benchmark assessments are regularly used to judge the effectiveness of implementation and provide the teacher with direction for student assistance.	Unit/theme/benchmark assessments are periodically used as described in column 4.	Unit/theme/benchmark assessments are occasionally used as described in column 4.	Unit/theme/benchmark assessments are rarely used as described in column 4.



	4	3	2	1
f.	Students at or above grade level are assessed at least three times a year, students somewhat below level are assessed every month, and students needing intensive intervention are assessed every one to two weeks and based on their programs.	All students are assessed three times a year, while students in intervention are sometimes assessed more frequently	All students are assessed three time a year.	An End-of-year assessment is the major focus.
g.	The principal regularly observes classrooms to determine the fidelity, effectiveness, and quality of program implementation.	The principal observes classrooms periodically as described in column 4.	The principal observes classrooms occasionally as described in column 4.	The principal rarely, if ever, observes classrooms as described in column 4.
h.	District leadership places a high priority on having the site principal observe and lead implementation.	District leadership generally supports having the site principals become knowledgeable with the program and complete classroom observations.	District leadership provides limited support to the principal related to the program and observations.	District leadership leaves the site principal alone with respect to classroom observation related to program implementation.

Criterion 13 overall rating = total points / 8 =
Add up total points and divide by 8 (the number of categories in this criterion).



### **Criterion 14: Analysis of the Data**

The whole district/school regularly analyzes data obtained through student testing. Principals use the data to identify teachers in need of closer supervision and additional assistance. Teachers use the data to adjust their own practices and modify instruction for students based on needs. District leadership analyzes the data to determine schools in need of focused assistance and the degree of oversight and autonomy to provide school leaders.

	4	3	2	1
a.	Student assessment data is collected according to a timeline and reported in such a way that patterns of implementation and student progress are clear.	Student assessment data is collected periodically and reported in such a way that patterns of implementation and student progress may or may not be clear	Some student assessment data is occasionally collected and analyzed to some degree.	Student assessment data is not collected; teachers keep this information in a variety of formats; individual teachers may or may not use this data.
b.	Monthly grade-level or team meetings provide the venue to regularly discuss program effectiveness and to analyze student assessment data and adjust accordingly.	Monthly grade-level meetings provide the venue to periodically discuss program effectiveness and to analyze student assessment data and adjust accordingly.	Occasional meetings are held to analyze and discuss the data.	At most, only end-of-year assessment data is analyzed.
c.	The principal and coach always analyze the program assessment and progress-monitoring data to identify benchmark, strategic, and intensive classrooms and prioritize assistance.	The principal and coach periodically analyze the unit/theme assessment data to identify benchmark, strategic, and intensive classrooms and prioritize assistance.	The principal may use the assessment information to work with teachers.	The principal does not look at assessment data during the school year.



	4	3	2	1
d.	The district leadership regularly analyzes the program assessments and progress-monitoring data to identify grades, classrooms, and schools needing targeted support.	The district leadership occasionally analyzes the unit/theme assessments to identify grades, classrooms, and schools needing targeted support.	The district leadership very infrequently analyzes unit/theme assessments to determine schools in need of additional assistance.	District leadership analyzes only the end-of-year outcome measures.
e.	Data is made public and used to analyze whether a program is weak, whether the program is proven but not being implemented well, or whether the problems are particular to individual students.	Data is occasionally made public and used as described in column 4.	Data is seldom made public and used as described in column 4.	With the exception of the end of the year state assessment, data is not made public.

Criterion 14 overall rating = total points / 5 =
Add up total points and divide by 5 (the number of categories in this criterion).



## **Criterion 15: Immediate and Targeted Intervention**

The district/school uses the ongoing assessment data and the data obtained from classroom observations to intervene immediately with both teachers and students. Intervention for instructional improvement is based on numbers of students and classrooms meeting district targets. If a school demonstrates a high rate of poor achievement, the central office is organized to provide swift support and frequent monitoring.

	4	3	2	1
a.	Because the district/school regularly collects and analyzes data, it intervenes swiftly with principals whose schools are not meeting benchmarks. Principals intervene swiftly with teachers.	The district/school regularly collects and analyzes data and intervenes with principals whose schools are not meeting benchmarks. Principals intervene with teachers.	Because the district/school does not regularly collect and analyze data, principals are not certain which teachers need assistance.	The district/school lacks a plan for teacher assistance or student intervention.
b.	Teachers who have fewer than 80% but more than 50% of students meeting benchmarks on designated tests receive immediate coaching support, planned visits to see model teachers, demonstration lessons, and mentoring to improve program implementation.	Teachers who have fewer than 80% but more than 50% of students meeting benchmarks on designated tests receive coaching support.	Teachers who have fewer than 80% but more than 50% of students meeting benchmarks on designated tests may receive coaching support upon request	Student failure is treated mostly as an individual student problem, rather than first determining if the program or implementation of a good program is effective.
c.	Teachers who have fewer than 50% of their students meeting benchmarks receive immediate and intensive assistance, including side-by-side teaching, model lessons, video practice, and visits to model classrooms. Close scrutiny and frequent observation occur.	Teachers who have fewer than 50% of their students meeting benchmarks receive intensive assistance in their classrooms. Close scrutiny and frequent observation occur.	Teachers who have fewer than 50% of their students meeting benchmarks may receive some additional coaching and the principal may complete an additional observation.	Student failure is treated mostly as an individual student population issue rather than first determining if the program or implementation of a good program is effective.





	4	3	2	1
d	based on identified needs and a determination of the degree to which student lack of achievement is caused by an ineffective program, ineffective implementation or individual student difficulty.	Student intervention is generally speedy and targeted based on identified needs and a determination of the degree to which student lack of achievement is caused by an ineffective program, ineffective implementation or individual student difficulty.	Some school wide interventions exist but are not well organized, systematic, or of sufficient quality or duration to significantly improve student achievement.	There is no school-wide intervention program

Criterion 15 overall rating = total points / 4 = \_\_\_\_\_ Add up total points and divide by 4 (the number of categories in this criterion).



### **Criterion 16: Validation and Recalibration**

Based on the ongoing assessment information, close and regular classroom observations, and the end-of-year high-stakes test, the district makes planned and thoughtful adjustments to its program, timeline, materials, and support plan.

	4	3	2	1
2	The district values and studies the results of all the regular assessments as well as the end-of-year state high-stakes assessment.	The district values and studies the results of most assessments as well as the end-of-year state high-stakes assessment.	The district studies the results of some assessments and discusses end-of-the year high stakes assessments	The district does not study any assessments except the end-of –the year high stakes test
k	Based on the results of the high-stakes assessment and the ongoing assessments, the district takes determined action to adjust the timeline, identify gaps in the selected program, refine implementation through teacher support and professional development, or select alternative programs and materials.	Based on the results of the high- stakes assessment and the ongoing assessments, the district makes some adjustments to the program and may support some professional development	The district may consider and attempt to implement changes with no particular plan or without regard to the identified gaps.	Little or no use is made of the end-of-year or other test data.
	All staff are informed of the planned changes and supported to implement them.	Most staff members are informed of plans to implement change and/may receive some support to implement the changes	A few staff members are informed of plans to implement changes and may receive some support to implement changes	No changes are planned.

Criterion 16 overall rating = total points / 3 = \_\_\_\_\_ Add up total points and divide by 3 (the number of categories in this criterion).



#### Year 1—Baseline

	Fall	Winter	Spring
Criterion 1			
Criterion 2			
Criterion 3			
Criterion 4			
Criterion 5			
Criterion 6			
Criterion 7			
Criterion 8			
Criterion 9			
Criterion 10			
Criterion 11			
Criterion 12			
Criterion 13			
Criterion 14			
Criterion 15			
Criterion 16			
Overall Total			