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Six Critical Guidelines for Evaluators

Aligning Standards with Instruction and Student Evidence Using the Marzano Teacher Evaluation Model

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Our Mission

Learning Sciences Marzano Center, West Palm Beach, Florida, promotes excellence in public education by developing and providing next- generation pedagogical tools, data systems, and training for K-12 educators at the school and district level. Our research department is committed to producing high quality and objective research dedicated to producing evidence-based results, ultimately facilitating sound policy and best practices in education. Under the direction of national researcher and author Dr. Robert Marzano, the Marzano Center identifies, develops, and disseminates cutting-edge resources in public education. With a staff of expert practitioners, consultants, and researchers, our goal is to support all K-12 educators to be highly effective, lifelong learners, and in doing so, to significantly impact student growth and achievement over time.

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Summary

This paper summarizes the key research and recommendations of several previous reports issued by Learning Sciences Marzano Center to guide districts as they support evaluators and teachers to make the shifts necessary for successful implementation of standards-based classrooms with the Marzano Teacher Evaluation Model. The present report focuses on six critical guidelines for evaluators conducting classroom observations: (1) recognition of the model of instruction within the Marzano framework; (2) identification of critical content scaffolded within and across lessons; (3) performance of standards-based observations. (4) accurate scoring and actionable feedback for teachers; (5) adoption of key teacher evaluation recommendations; and (6) leveraging the research, tools, and training offered by Learning Sciences International as teachers and administrators make the critical shift to rigorous, standards-based classrooms.

A Call to Action: Observing the Standards-Based Classroom

Many educators have witnessed the following classroom teacher observation scenario: A well-intentioned evaluator visits a classroom, observes instruction, and classifies use of instructional strategies to determine the teacher's effectiveness. After the observation, feedback tends to focus on describing what the evaluator has seen, followed by suggestions and questions for the teacher to consider.

But for teachers being asked to adopt, implement, and achieve success with rigorous standards, such observations, although fine as a starting point, are insufficient to support them as they make the transition to more rigorous academic standards. To guide evaluators in making the necessary shifts in their observational practices, Learning Sciences Marzano Center, West Palm Beach, Florida, is issuing a critical call to action for district leaders, principals, and all staff who observe or support teachers to *leverage the observational framework* and process to help teachers implement a *model of instruction* aligned to standards that incorporates student evidence of learning. The process is built into the Marzano Teacher Evaluation Model and accompanying protocols, and has been articulated in previous reports published by Learning Sciences International (see Marzano & Toth, 2014, "Teaching for Rigor: A Call for a Critical Instructional Shift" and Marzano, Carbaugh, Rutherford, Toth, 2013, "Marzano Center Teacher Observation Protocol for the 2014 Marzano Teacher Evaluation Model"). This paper summarizes our recommendations for successful implementation of the Marzano Teacher Evaluation Model in the standards-based classroom.

Some Principles for Rigor in the Classroom

Generalizations about what should or should not occur in classrooms should be guided by research-based principles. Here we consider two such principles.

Rigor Is Achieved by the Careful Scaffolding of Information and Tasks

There are a number of suggestions about classroom practices currently being made that are grounded in the notion that simply providing students with complex tasks will enhance the rigor of their thinking. In fact, providing students with complex tasks without providing direct instruction in the foundational knowledge and skills can be detrimental to enhancing rigor. Evidence for this has been reported in the literature for decades. To illustrate, consider the research on "discovery learning" which can roughly be defined as providing students with tasks that require them to explore related ideas and concepts with the intent of constructing new generalizations and principles. In 2004, Mayer examined the literature on such approaches and concluded that they had little positive effect, summarized in his article, "Should There Be a Three-Strikes Rule Against Pure Discovery Learning? The Case for Guided Methods of Instruction." More recently, in their meta-analysis of 580 experimental comparisons between discovery learning and direct instruction, Alfieri, Brooks, Aldrich, and Tenenbaum (2011) concluded that direct instruction is superior to discovery learning instruction in most situations. While such a finding might lead one to conclude that classroom activities like discovery learning should be abandoned in lieu of direct instruction, the researchers' second meta-analysis (reported in the same article) found that "enhanced discovery learning" was superior to other forms of instruction. By definition, enhanced discovery learning involves direct instruction on basic vocabulary, details, principles, and generalizations along with teacher-directed discussions about the validity of information and tentative conclusions. Undergirding all such activity is a well-conceived progression of information and tasks designed by the teacher.

Teacher Actions in the Classroom Have a Direct Relationship with Students' Depth of Learning

There is some discussion in the field that teacher actions are not strongly related to student learning in general and depth of student learning in particular. Again, an assumption underlying this misconception is that the tasks provided to students are most critical to the depth of their learning, rather than the strategies employed by the teacher. Coupled with this misconception is the assumption that if a teacher knows his or her subject matter content, and then provides students with complex tasks, students will learn at rigorous levels. The importance of teacher knowledge of content seems almost self-evident, and therefore commonly goes unchallenged as a more critical factor in student learning than teacher actions. While teacher knowledge of content is certainly important, research does not support its preeminent place in the teaching and learning process. To illustrate, consider Hattie's (2009) analysis of 52,637 studies and 146,142 effect sizes. From that analysis, 138 variables were identified as related to student achievement. Teacher depth of knowledge was ranked 125th with an effect size of .09, an effect size associated with a 4 percentile point gain in student achievement. In contrast, teacher actions in general were rated 56th, with an effect size of .44. This effect size is associated with a 17 percentile point gain in student achievement. What is perhaps most interesting in Hattie's findings is that training teachers in the use of instructional strategies at a detailed level (referred to as microteaching) was rated 4th overall, with an effect size of .88. This effect size is associated with a 31 percentile point gain in student achievement.

Using the Model to Foster Rigor

It is important to note that the Marzano Teacher Evaluation Model was deliberately developed as a model of instruction to improve teacher pedagogy, and as such, it is uniquely suited to address rigorous classroom instruction under new standards. To be fully effective as both an *evaluative and growth framework,* however, a shift in observer practice is required. Observers who simply classify instructional strategies and provide minimal feedback will not fully support teachers to succeed with the demands of the new standards. The required shift in observer practice asks us to refocus the lens of teacher evaluation: to move from compliance with human resource processes (i.e., rating teachers) to a greater emphasis on leveraging the observational and feedback process to support necessary teaching shifts with new standards.

Observers must now focus on inspecting classroom implementation of new academic standards, and on helping teachers identify and plan for the level of instruction necessary for students to demonstrate evidence of progress toward those standards. To this end, Learning Sciences Marzano Center provides key recommendations and supports to district personnel and evaluators to help ensure that all teachers achieve standards-based instruction using the Marzano Teacher Evaluation Framework.

Our national research center offers the following six critical guidelines for district personnel and evaluators as they observe and coach effective classroom instruction. Observers should:

1. Identify and *leverage the model of instruction* within the Marzano Teacher Evaluation Model
2. Identify visible *scaffolding to standards* within a lesson and across related lessons
3. Conduct *standards-based* observations to inspect and support standards implementation and achievement
4. Develop accurate *scoring practices* and provide *actionable and specific feedback* to teachers
5. Adopt *key evaluation system recommendations* to emphasize the implementation and achievement of new standards while maintaining validity and reliability for high-stakes teacher evaluation
6. Leverage Learning Sciences Marzano Center research, training, principal coaching, and supports

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The Six Critical Guidelines for Evaluators

1. Identify and leverage the model of instruction within the Marzano Teacher Evaluation Model

The Marzano Teacher Evaluation Framework embodies a robust model of instruction. The teacher actions and evidences in the element Providing Rigorous Learning Goals and Performance Scales are the first step in establishing standards-aligned instruction and communicating standards-aligned expectations for student learning. To provide rigorous learning goals and performance scales, teachers follow a process for creating learning targets and scales that includes the following steps: (1) unpack one or more related standards (Figure 1) to identify learning targets, (2) use a taxonomy (Figure 2) to identify levels of cognitive complexity required by the learning targets; and (3) organize learning targets into a scale (Figure 3) that describes levels of performance to attainment of the standard. The learning targets in the scale are organized into a learning progression of the essential knowledge and skills students need to attain in order to demonstrate mastery of, and extend their knowledge beyond, the standard. These learning targets then become the critical content of lessons.

Figure 1: Example of Learning Targets for Common Core (CCSS.Math.4.G.A.2) Standard

(CCSS.Math.4.G.A.2) *Classify* two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. *Recognize* right triangles as a category, and *identify* right triangles.	
Declarative Knowledge (Essential Knowledge)	**Procedural Knowledge (Essential Skills)**
• ***Recognize*** and ***recall*** academic vocabulary: Absence, angles, parallel line, perpendicular line, presence, right triangle • ***Describe*** the key parts of two-dimensional figures, including: quadrilaterals, triangles, and presence or absence of parallel lines, perpendicular lines, or angles of a specified size	***Classify*** two-dimensional figures based on the presence or absence of parallel or perpendicular lines
	Classify two-dimensional figures based on the presence or absence of angles of a specified size
	Recognize right triangles as a category of two-dimensional figures
	Identify right triangles

Figure 2. New Taxonomy of Educational Objectives (Marzano and Kendell)

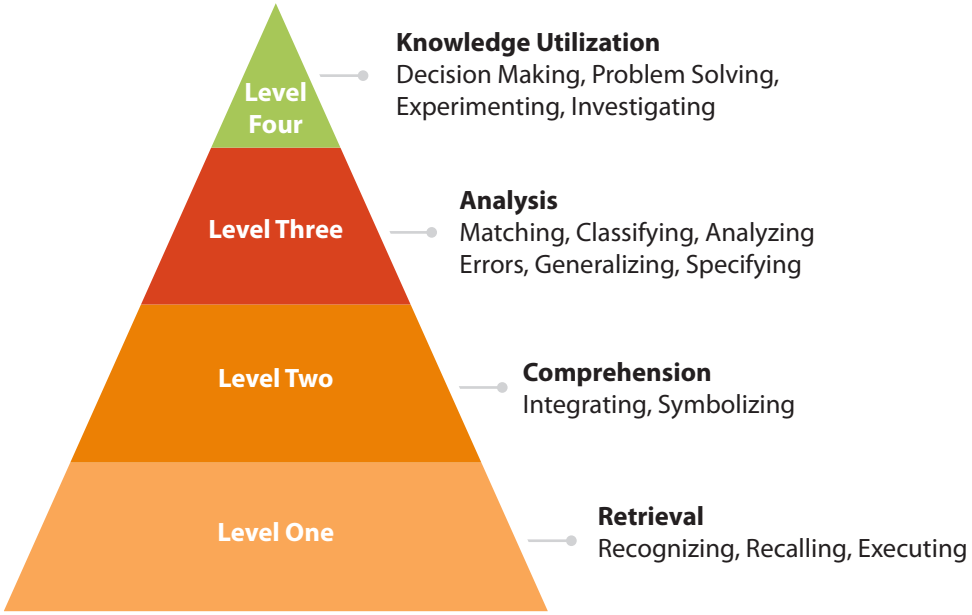

Figure 3. Example Student Performance Scale for Common Core (CCSS.Math.4.G.A.2) Standard

(CCSS.Math.4.G.A.2) *Classify* two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. *Recognize* right triangles as a category, and *identify* right triangles.	
4.0	Students will be able to: • ***Determine*** the best way to classify two-dimensional shapes into groups when comparing more than one attribute at a time
3.0	Students will be able to: • ***Classify*** two-dimensional figures based on the presence or absence of: o Parallel or perpendicular lines o Angles of a specified size
2.0	Students will ***recognize*** or ***recall*** specific vocabulary, including: • Absence, angles, parallel line, perpendicular line, presence, right triangle Students will be able to: • ***Describe*** the key parts of two-dimensional figures, including: o Quadrilaterals (square, rectangle, trapezoid, parallelograms, rhombus) o Triangles (right, acute, obtuse) o Presence or absence of: - Parallel or perpendicular lines - Angles of a specified size • ***Identify*** right triangles • ***Recognize*** right triangles as a category of two-dimensional figures
2.0	With help, partial success at 2.0 content and 3.0 content
1.0	Even with help, no success

Using the student performance scale in Figure 3, we can see that the critical content of standards-based lessons are the learning targets in the scale, and that the learning targets increase in cognitive complexity as they go up the scale levels. The learning targets and the scale inform instructional decisions for planning lessons and the selection of research-based strategies that will help students learn the critical content and produce evidence of mastery of the progression of learning targets. When new content is being introduced, it is likely more appropriate for teachers to use strategies from Design Question 2 to help students build foundational knowledge. Later in the lesson, or in subsequent lessons, teachers would expect to use instructional strategies from Design Questions 3 and 4 to allow students to deepen their knowledge or utilize their knowledge of the same critical content.

Instruction must always align to the taxonomy level of the learning target(s) being addressed in the lesson.

Instruction must always align to the taxonomy level of the learning target(s) being addressed in the lesson. This connection of instructional strategies with the taxonomy level of targets in the scale facilitates the progressive attainment of essential knowledge and skills leading students to demonstrate mastery of the standard. Lessons should scaffold in cognitive complexity as they address the progression of learning targets from simple to more complex in the scale.

Therefore, when used to their potential, Design Questions 2–4 of the Marzano Teacher Evaluation Model require observers, when providing feedback to teachers on their use of instructional strategies, to focus *on student evidence of the critical content of the lesson.* Critical content and instructional strategies cannot be separated. The purpose of instruction is for students to learn and demonstrate understanding of critical content. Therefore, feedback on the implementation of instructional strategies must focus on whether the instructional strategy has had the *desired effect* of students building foundational knowledge or deepening their understanding of critical content. Without this link between strategies and content, there is little purpose for instruction. This is why both the Applying and Innovating levels of the elements in Lesson Segments Addressing Content require student evidence of the desired effect focused on critical content at the correct taxonomy level.

Student evidence of the desired effect of instructional strategies must always be at the taxonomy level of the learning target. For instance, if the learning target is at the Comprehension level of the taxonomy, the student evidence must also be at the Comprehension level. If the learning target is at the Knowledge Utilization level, student evidence must be as well.

There are circumstances, particularly at the higher end of the taxonomy, in which a teacher might use a sequence of instructional strategies to help students learn and demonstrate attainment of an individual complex learning target at Level 4 of the performance scale. In these instances, the initial strategies used may be at a lower taxonomy level than the complex target, but the strategies will rapidly progress in cognitive complexity so that the last or culminating activity will be aligned to the cognitive level of the learning target. The skilled observer will see that the teacher is intentionally progressing or scaffolding to the correct taxonomy level of the target, and that students are on track with the learning. The observer will ultimately check the culminating student evidence for the accurate taxonomy level.

2. Identify visible scaffolding to rigor of the standards within a lesson and across related lessons

In "Teaching for Rigor: A Call for a Critical Instructional Shift" (2014) Marzano & Toth detailed an analysis of 2.1 million data points generated from teacher observations nationally that revealed a disproportionate emphasis on direct instruction strategies and a lack of observed frequency of strategies more suited to deepening students' thinking or generating complex learning. This data suggests that teachers are placing too much emphasis on building students' foundational knowledge, and that teachers need to purposefully shift to the use of more rigorous strategies as they scaffold instruction to the cognitive complexity inherent in the new standards.

Teachers must therefore intentionally plan to scaffold instruction to reach the cognitive complexity of the standard by the end of the lesson sequence. The instructional time for each target and sequence of lessons will vary. It is recommended that teachers spend greater time using strategies from Design Questions 3 and 4 than is typically observed so that they scaffold more quickly up the learning progression using deepening and complex learning strategies with greater frequency. This will allow more class time for cognitively complex strategies that will prepare students to demonstrate rigorous standards.

If students struggle with the more cognitively complex content, it is appropriate for the teacher to check which learning targets the student has not mastered and to specifically review only the critical content that the student is lacking. The element Tracking Student Progress is fundamental for this process. This research-based strategy allows teachers and students to track student progress on the progression of learning outlined in the scale using student evidence of learning to demonstrate proficiency of rigorous standards.

This process of aligning lessons to learning targets—quickly scaffolding to rigorous content and strategies while using student evidence to track student progress—allows teachers to be more efficient and effective during their class time. An observer should carefully note the teacher actions and evidences in the elements of Design Questions 1–4 (see Figure 5) to give specific feedback and help teachers grow in this critical area of scaffolding to standards.

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One recommendation that would help to focus and support teachers in this transition from an overreliance on direct instruction strategies, without requiring additional time from evaluators, is to focus the formal or scheduled observations on deepening or complex learning lessons where Design Questions 3 or 4 are being addressed and therefore evidence of students engaging in more complex thinking and tasks should be evident as well.

3. Conduct a standards-based observation to inspect and support standards implementation and achievement

Conducting a standards-based teacher observation simply means making standards implementation and evidence in student work the *primary focus* of the classroom visit. This focus does not require additional time or observations on the part of the evaluator; however, by making this shift in emphasis, the observation process may become more meaningful for teacher growth and student achievement. Preparation and communication is critical so that teachers are clearly aware of the observation focus and expectations. A move in this direction will help teachers understand that the Marzano framework is not just an evaluation system but a professional growth system that they can and should use for ongoing pedagogical improvement.

Learning Sciences Marzano Center makes the following recommendations to help support such focused, standards-based observations:

a. **Before the observation, clarify the expectation of a quality, standards-based scale** (see Marzano Center Teacher Observation Protocol 2014). The observer should communicate that the lesson to be observed should clearly identify the learning targets being addressed on the scale, the taxonomy level of the learning targets, the most appropriate research-based content strategies, and the resulting student-produced evidence to demonstrate mastery of the taught learning targets for that lesson at the correct taxonomy level.

b. During a pre-conference for a formal observation, the following questions may be provided to the teacher for transparency and as a support the teacher may use to plan for the observed lesson. **Conduct the observation using the following questions as a guide:**

i. Are both teacher and students using a quality standards-based scale on the current standards that the lesson(s) is addressing?

ii. Can the observer identify the learning target(s) and taxonomy level(s) of the learning target(s) being addressed in the lesson (i.e., the critical content)?

iii. Are the research-based content strategies appropriate to generate the level of student evidence required by the learning target(s) and taxonomy level (e.g., strategies for introducing content, practicing and deepening content, or complex learning involving generating and testing hypotheses)?

iv. If the content strategies are appropriate to generate the student evidence required by the learning targets and taxonomy level, is the teacher using the content strategies correctly?

v. Is the teacher monitoring whether the content strategies have generated the desired effect in student evidence of the learning target at the correct taxonomy level? If so, how many students achieved the desired result in their evidence?

vi. Are all students tracking their progress on the scale to their achievement of learning targets as a progression to the standard(s)?

vii. Is the teacher using the data from tracking student progress on the scale to reflect and plan for the next lesson to address student needs?

The preceding constructs are embedded in the 2014 observational protocols. If one desires a shift in teacher practices to align with the new, more rigorous standards, then it stands to reason that observer practices will need to shift as well. If this observational process is a change from past practice, we recommend that the observer communicate the change prior to the first observation conducted according to the preceding guidelines. The observer should allow teachers some safety to calibrate with the observer's expectations. To help norm the faculty to the evaluator's focus, it is appropriate to allow teachers a "do over" by simply marking the observation as non-evaluative. In this case, the observer should still complete the observation by providing specific and actionable feedback on what the teacher should improve for the next observation.

4. Develop accurate scoring practices and provide actionable and specific feedback to teachers

Meaningful and focused feedback begins with accurate scoring of observed teaching practices. The following are recommendations and best practices for scoring.

We recommend that observers:

- Adopt and use the Learning Sciences Marzano Center 2014 Teacher Observation Protocol.
- Identify elements most likely to generate student evidence for learning target(s) addressed in the lesson at the correct taxonomy level. If those content strategies are absent—for example, if a lesson's learning targets are at the Analysis level of the taxonomy but no deepening strategies (e.g. similarities and differences, examining reasoning) are apparent—then scoring at the Not Using level may be appropriate.
- Require teachers to use scales aligned with the standards-based criteria set forth in the 2014 Teacher Observation Protocols.
- Understand that Identifying Critical Content should be evident in all content strategies (as the progression of learning targets on the scale). Identifying Critical Content may therefore be scored in every lesson. If the learning target for the lesson is not aligned to the correct taxonomy level, then it is appropriate to score Identifying Critical Content at the Beginning level, because the teacher is using the strategy with errors.
- Ensure that the desired effect of content strategies is clearly evident in student work reflecting the learning target(s) and correct taxonomy level.
- Ensure that students are tracking their own progress on the standards-based scale.
- Ask how the teacher is using data, both from tracking individual student progress and progress of the class as a whole, to plan upcoming lessons. The teacher should be using this data to plan future instruction based on student progress or lack thereof to achieve the standards in the scale and to reflect on the effectiveness of her or his classroom practices.

Figure 4. Using the Standards-Based Scale to Drive Inspection of Student Evidence for Attainment of Standards

Generic Teacher Evaluation Scale for Content Strategies				
Not Using	**Beginning**	**Developing**	**Applying**	**Innovating**
Strategy was called for but not exhibited	Uses strategy incorrectly or with parts missing	Uses strategy correctly but the majority of students are either not monitored for or not displaying the desired effect in student evidence	Monitoring all students and **the desired effect is evident in the majority of student evidence**	Using adaptations to achieve the desired effect in all students' evidence

Guidelines for Evaluating Student Evidence

1. Student evidence must be related to the critical content (e.g. learning target[s] for the lesson).
2. Student evidence must be at the correct taxonomy level of the scale.
3. If the teacher is using the content strategy correctly and monitoring, but the student evidence is not at the correct taxonomy level of the learning target, then a Developing rating is the highest rating the teacher should receive. The desired effect is achieved only when student evidence of the learning target is at the correct taxonomy level.

Guidelines for Actionable Feedback

Once the observer has assigned accurate scores and gained a deeper understanding of why those scores are accurate, the next responsibility is to provide specific, actionable feedback to the observed teacher. Such feedback helps teachers move to the next scale level in the protocols to improve both their own practice and student outcomes. Observer feedback must shift from descriptions of teacher actions to specific and actionable next steps for moving up to the next level of the scale (or "feeding forward"). Feeding forward helps teachers self-identify what was effective and worth building on in the lesson and what was missing or could have been more effective to put in place for the next lesson, with a particular focus on standards implementation: in other words, standards-based scales, appropriate instruction at the correct taxonomy level, and student evidence of the desired effect and student progress toward lesson targets.

Learning Sciences Marzano Center has a an extensive bank of resources, technology tools, principal coaching and professional development services to support effective feedback, including the Essentials for Achieving Rigor book series and side-by-side principal coaching for standards-based observations.

Observer feedback must shift from descriptions of teacher actions to specific and actionable next steps for moving up to the next level of the scale (or "feeding forward").

5. Adopt key evaluation system recommendations to emphasize the implementation and achievement of new standards while maintaining validity and reliability for high-stakes teacher evaluation

As evaluation systems mature and respond to legislative mandates, ongoing review and updates to these systems will be necessary. Dr. Robert Marzano and Learning Sciences International established the Learning Sciences Marzano Center as a national research center to offer continued guidance and technical assistance to districts implementing the Marzano evaluation models for teachers, school leaders, district leaders and non-classroom instructional personnel.

As a research organization, Learning Sciences Marzano Center takes great care that our recommendations continue to reflect alignment with the research-base on most effective instruction, and that our guidelines further maintain the validity and reliability of the model for high-stakes evaluation. With these goals in mind, Learning Sciences Marzano Center makes the following recommendations to districts to ensure that their evaluation systems have maximum leverage for implementation and attainment of academic standards in every classroom. Districts should:

1. Communicate with district stakeholders the need to leverage the evaluation system to support teachers' implementation of new standards and their students' achievement of those standards
2. Ensure that teachers understand the model of instruction at the heart of the Marzano Teacher Evaluation Framework
3. Train and calibrate observers to the standards-based observation process outlined in this paper
4. Train and calibrate observers to provide effective teacher feedback for the standards-based observation
5. Provide greater weight to recommended elements necessary for implementation of the standards and to those elements having greater predictive value

Recommendations for Weighting Domain 1 Elements

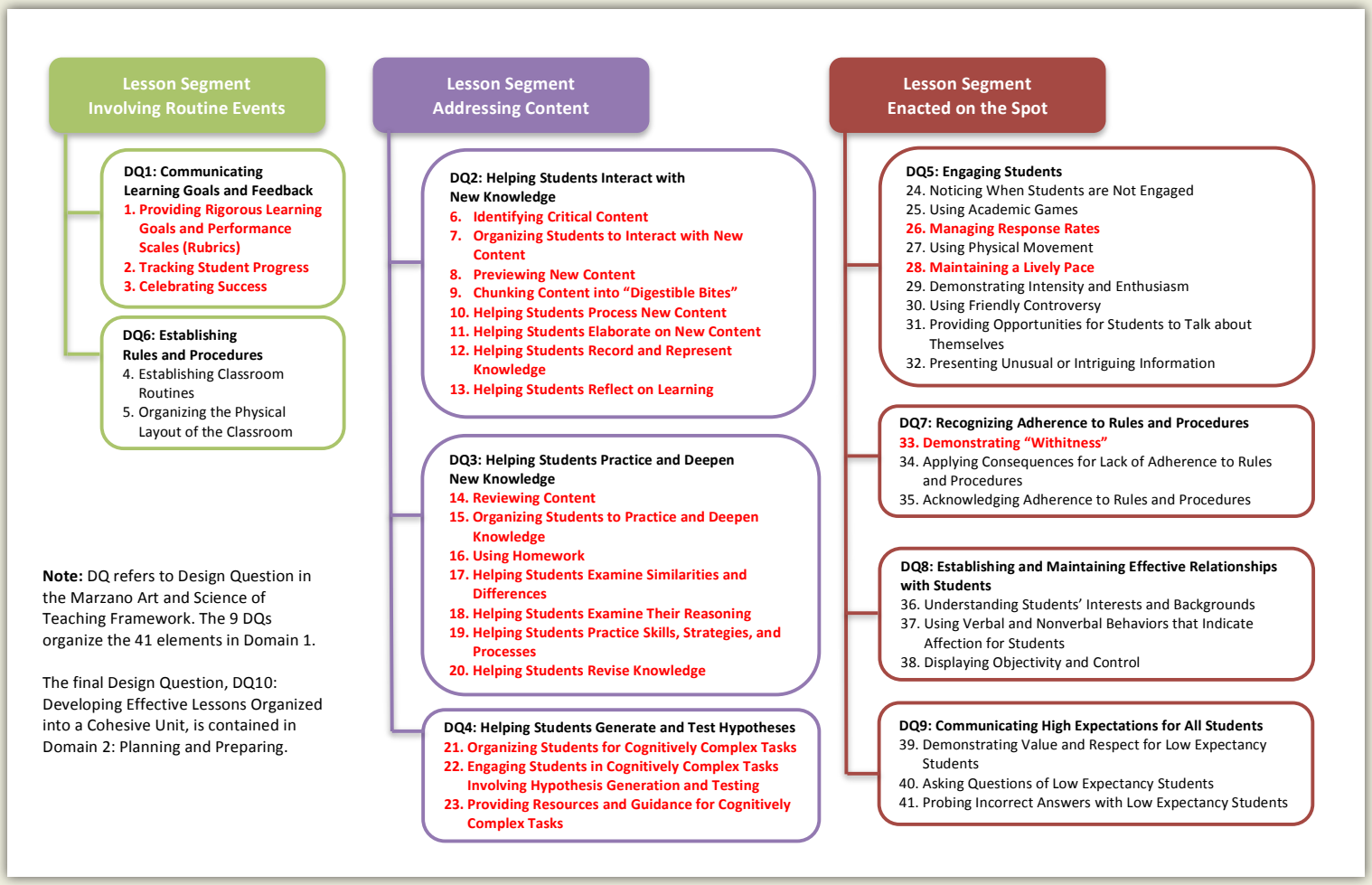
Although weighting Domain 1 elements is optional, adding weight to those elements necessary for the implementation of standards will help both observers and teachers focus on the model of instruction within the Marzano framework. The elements for greater emphasis are located in Design Questions 1-4 and center on defining the standards-based scale, tracking student progress to attainment of standards, and the teacher's use of research-based strategies to scaffold instruction to complexity.

Although they may carry less weight, Design Questions 5–9 ("Lesson Segments Enacted on the Spot") and Design Question 6 will continue to be vital for new teachers and for specific classroom situations; they are critical to support the conditions for learning. However, there are some notable exceptions within Design Questions 5–9 that have shown greater predictive value on state valued-added measures (VAM). Based on a review of observational data correlated to state VAM scores, the following group should also be included in the group of Domain 1 elements receiving higher weight: Managing Response Rates, Maintaining a Lively Pace, and Demonstrating "Withitness" (see Figure 5).

Learning Sciences Marzano Center recommends that districts exercise their option to create a Domain 1A and a Domain 1B to distribute greater weight to the group of elements in Domain 1A. Our research center provides technical assistance to districts desiring to move in this direction, as this realigned emphasis will likely strengthen both focus on the standards and validity of the framework to strengthen student achievement.

For districts declining this option, the research base of the framework remains unaffected. It should be noted that Learning Sciences Marzano Center does *not* recommend weighting at the individual element level, but only at a group level, as detailed earlier. Weighting individual elements may have unintended consequences that may negatively affect the validity and reliability of the evaluation system, as many classroom content strategies are intended to scaffold together.

Figure 5, Domain 1 Classroom Strategies and Behaviors with Elements in Red Text Indicating Greater Weight



6. Leverage Learning Sciences Marzano Center research, training, principal coaching, and supports

The following resources are available to support your leaders and teachers as you make the necessary instructional shifts to more rigorous instruction and higher student achievement on the new academic standards.

District and School Leaders

Leading Rigorous Unit Planning

This 3-day leadership companion to *Planning Rigorous Units* (for teachers) provides leaders with the tools and skills to support teachers through focused and actionable feedback on unit planning along with how to monitor the implementation of new standards into units of instruction. Principals practice with real examples of teacher-created units to identify accurate levels of rigor within the stages of planning, instruction, and reflecting with student evidence all aligned to a standards-based performance scale.

Leadership Academy

This intensive 2-day session is a practical application of the Marzano School Leader Evaluation Model and Marzano Teacher Evaluation Model using your data to incorporate into your school and district improvement plan. Consultants guide leaders as they build an aligned focused, and authentic school improvement plan with measurable improvement. Principals learn and practice specific and actionable feedback to ensure teachers and leaders are continuously improving their leadership and instructional practices.

Standards-Based Observation (Side-by-Side Principal Coaching)

In this module, a consultant walks you through the standards-based classroom observation, accurate scoring and actionable feedback process. We begin by establishing goals for the session, then move to classroom visits looking for standards-driven lessons with evidence that students are learning to the rigor of the standard. After visiting classrooms, observation data is analyzed against the intent of the standard driving all aspects of the lesson. Principals learn methods for providing specific, actionable feedback to teachers all based around alignment of standards to instruction.

Observing for College and Career Readiness Standards

How does the Marzano Teacher Evaluation Model relate to your state's college and career readiness standards? This session identifies the basic tenets of how to utilize the Marzano framework to meet the cognitive complexity of rigorous standards, instruction, and student evidence. Participants apply the 2014 Marzano Teacher Evaluation Model to support achievement of deep classroom implementation.

Essentials for Achieving Rigor for Teachers

Teachers learn to intentionally plan with college and career readiness standards, reflect using student evidence, collaborate with peers engaged in the same work, and monitor student learning through student evidence all in an environment designed to nurture, guide, and engage.

Teachers and Instructional Coaches

Monitoring for Learning

Effective standards-based instruction requires teachers to continuously check students' understanding in their learning journey toward mastery of the standard. Learn how to intentionally and systematically build monitoring into their lessons; build a toolbox filled with monitoring techniques, tools, and resources; and learn to determine if students are merely exhibiting compliant behavior or are cognitively engaged

and actively learning the content. Participants will discover ways to formatively assess learning during lessons and adapt instruction based on student evidence as students advance their knowledge toward learning targets.

Goals and Scales

Standards-based planning begins with deconstructing the standards and understanding the complexity required, then building the progression of learning for students. Participants create rigorous learning targets, build performance scales, and learn techniques for implementing this powerful tool for guiding teachers and students to rigor.

Monitor and Measure

Once performance scales are being utilized by classroom teachers, they can now learn how this criteria for success defines and drives assessment with the evidence to track student progress and the desired result of celebrating student progress. Learn to use rigorous learning targets from a performance scale to make instructional decisions (monitor) and drive formative assessment (measure). Participants will then have the opportunity to design or strengthen their approach for tracking and celebrating student progress in their own classroom.

Teaching Foundations

Plan foundational lessons with standards-based criteria to identify critical content and group students as they process, elaborate, record, and represent their knowledge. Participants learn techniques to monitor the results of foundational strategies on students and adapt instruction so that all students can demonstrate their learning towards the standards.

Guiding Deeper Thinking

Explore how to manage student response rates with question sequence techniques, as well as help students practice skills, examine similarities and differences, analyze their reasoning, and revise their knowledge. Participants learn to plan and monitor lessons that guide students into deeper thinking strategies to demonstrate their understanding of the standard.

Facilitating Complex Learning

Learn how to plan each step of a cognitively complex task such as investigation, problem solving, experimental inquiry, and decision making. This is the required level of thinking for students to deepen their learning. Participants gain techniques to organize students and provide guidance and support as they engage in cognitively complex tasks.

Conditions for Learning

Creating an environment in which students are willing and able to focus on rigorous learning is key. Learn how to intentionally plan strategies that meet student needs and situations. Participants will strengthen their practice and uncover other strategies, conditions, and criteria (including conative skills) to make the shifts necessary to prepare students for college and career.

Vocabulary for Learning

Aligned to the Marzano six-step process for vocabulary instruction, this training helps teachers systematically build strategies so they can help students understand and apply the rigorous academic vocabulary demanded from the college and career readiness standards into their instructional practice. Learn each step of the vocabulary instruction process, see examples of how to implement them, receive monitoring techniques, and determine how to track student progress for each. Participants will also plan specific activities to implement each step in their own classroom.

Instructional Decision Making

Teachers need strategic and efficient use of instructional strategies so that students are able to demonstrate rigorous standards within time constraints. Participants will learn to align strategies with standards-based performance scales, and how to make instructional decisions that help students demonstrate understanding of content within a rigorous learning progression.

Teach to Reach

Having already created performance scales, monitored for desired results, and delved into instructional strategies, participants of Teach to Reach will reflect on their practice to identify learners who need extra support. Participants will study specific techniques to bolster learning for students with English as their second language, students who lack support for schooling, students receiving special education, and high-performing students. Participants then generate plans of action to address students' needs and ensure that they all have opportunities to reach their goals. This hands-on session gives teachers instructional strategies, tools, and resources to use immediately in the classroom.

Instructional Coaches

Coaching for Implementation

On-site coaching sessions provide strategies and processes specific to the learning and implementation of the corresponding training day in which an expert consultant facilitates classroom observation, actionable feedback based on teacher and student evidence, and coaching to strengthen the implementation of the Marzano Center Essentials for Achieving Rigor.

Sessions focus on coaching strategies to support teacher implementation, establishing next steps in improving practice as instructional leaders, and using technology tools to accelerate implementation. Sessions are a mixture of coaching content, technical training, and choice of either:

1. *Classroom Visits* – instructional coaches visit classrooms and afterwards share their observations and learn ways to provide specific feedback utilizing the technology tools, or
2. *Examining Artifacts* – technology tools are further utilized to study artifacts (lesson plans, performance scales, proposed or completed student work) to analyze teacher practice. Artifacts are provided by the participants as examples of implementation.

Marzano Center Results-Coach Certification

This competency-based certification develops strong instructional coaches who can lead and sustain instructional growth. The innovative five-tiered certification pathway will galvanize your district's leadership coaching program to impact professional learning, coaching practices, and professional learning communities; provide support for new teachers, classroom teachers, and struggling teachers; and build a powerful human capital pipeline for future school administrators.

The program, developed through data-focused content modules, provides results-driven coaching along with tools and technology to support, measure, and sustain the critical instructional shifts required by rigorous new standards, building capacity to support and guide teachers through continuous improvement.

District and School Leaders

Goals and Scales for Leaders moves past the foundation of understanding rigorous standards to how to lead your teachers in implementing rigorous performance scales. In this 'hands-on' session, leaders focus on how to facilitate and give feedback on rigorous learning goals and performance scales that represent a progression of learning required by standards. Participants learn the characteristics of effective scales and how to provide support as teachers unpack the standards in order to identify essential knowledge and skills to create learning targets and performance scales. **Goals and Scales for Leaders* aligns with *Goals and Scales* for teachers and instructional coaches.

Monitor and Measure for Leaders is a hands-on session that shows leaders how to give specific, actionable feedback on using rigorous learning targets from a performance scale to make instructional decisions and teacher-created formative assessments. Leaders will have the opportunity to provide feedback on the design of or approach to tracking and celebrating student progress within classrooms. **Monitor and Measure for Leaders* aligns with *Monitor and Measure* (for teachers).

Instructional Decision Making for Leaders
Leaders learn the strategic and efficient use of instructional strategies then lead forward by practicing with an expert consultant and teacher-created plans. Participants learn how to look for aligned strategies with standards-based performance scales, and instructional decisions. **Instructional Decision Making for Leaders* aligns with *Instructional Decision Making* (for teachers).

Supplementary Book Series

The Marzano Center Essentials for Achieving Rigor Series is a collection of books designed to help teachers develop expertise on essential strategies that move students toward high-order thinking skills required by today's college and career readiness standards. Authored by Dr. Robert J. Marzano and his team of highly skilled education experts from the Learning Sciences Marzano Center, each book addresses key areas of teacher effectiveness and shows educators how to have the most positive impact on student learning and teacher growth.

Recommended books:
School Leadership for Results

Essentials for Achieving Rigor Book Series:

1. *Creating & Using Learning Targets & Performance Scales: How Teachers Make Better Instructional Decisions*
2. *Identifying Critical Content: Classroom Techniques to Help Students Know What is Important*
3. *Organizing for Learning: Classroom Techniques to Help Students Interact Within Small Groups*
4. *Practicing Skills, Strategies, & Processes: Classroom Techniques to Help Students Develop Proficiency*
5. *Processing New Information: Classroom Techniques to Help Students Engage With Content*
6. *Recording & Representing Knowledge: Classroom Techniques to Help Students Accurately Organize and Summarize*
7. *Revising Knowledge: Classroom Techniques to Help Students Examine Their Deeper Understanding*
8. *Examining Similarities & Differences: Classroom Techniques to Help Students Deepen Their Understanding*
9. *Examining Reasoning: Classroom Techniques to Help Students Produce and Defend Claims*
10. *Engaging in Cognitively Complex Tasks: Classroom Techniques to Help Students Generate & Test Hypotheses Across Disciplines*

Conclusion

Learning Sciences Marzano Center has issued this report as a set of guidelines for evaluators in districts implementing the Marzano Teacher Evaluation Model as a growth model for teachers in a standards-based classroom. The instructional model embedded in the Marzano framework makes it uniquely suited as a system for both accurate and fair teacher evaluation, as well as for ongoing development of teacher pedagogy aligned to standards. Research projects such as the one conducted in Pinellas County, Florida have yielded encouraging findings in both teacher growth and increased student achievement when the model is implemented according to the recommendations outlined here and in previous Learning Sciences Marzano Center publications. Learning Sciences International offers a full complement of services and supports to help districts transition to standards-based classrooms in a high-stakes evaluation environment.

For further information about our research and support services, please call us at 1.877.411.7114, or visit the Center at MarzanoCenter.com.

References

Alfieri, L., Brooks, P. J., Aldrich, N. J., & Tenenbaum, H. R. (2011). Does discovery-based instruction enhance learning? *Journal of Educational Psychology,* 103 (1), 1-18.

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement.* New York: Routledge.

Marzano, Robert J., Carbaugh, Beverly G., Rutherford, Amber, & Toth, Michael D. (2013). Marzano Center Teacher Observation Protocol for the 2014 Marzano Teacher Evaluation Model. Retrieved from: http://www.marzanocenter.com/Teacher-Evaluation/2014-model/

Marzano, Robert J. & Toth, Michael D. (2014) Teaching for Rigor: A Call for a Critical Instructional Shift. Retrieved from: http://www.marzanocenter.com/essentials/

Mayer, R. E. (2004). Should there be a three-strikes rule against pure discovery learning? The case for guided methods of instruction. *American Psychologist,* 59, 14-19.

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