Marzano Causal Teacher Evaluation Model
Based on the Art and Science of Teaching

By:
Wes Holsinger, Learning Sciences International
Who is Learning Sciences International?

- Experts in the field of teacher and principal growth, development and evaluation
- Statewide provider of teacher evaluation technical assistance for the Florida Department of Education
- Partners with Dr. Robert Marzano, Charlotte Danielson and ASCD, and Dr. Douglas Reeves
- Implementations with districts in 38 states
- Providers of professional development, observer training, and iObservation growth, development and evaluation data systems
Districts using binary ratings for teacher evaluation:

- More than 99% of teachers receive satisfactory ratings in districts using binary ratings (satisfactory/unsatisfactory)

Districts using binary ratings for teacher evaluation:

- 94% of teachers receive one of the top two ratings
- Less than 1 percent are rated unsatisfactory
- Inflation of ratings is pervasive in many district evaluation systems
Questions

• When most all teachers are rated the same, do we honor great teachers?

• How can we expect teachers to improve when their instructional performance is not differentiated nor accurately rated?
The Importance of Effective Teaching and Leadership

Research tells us that the role of the teacher is the single greatest factor on student learning.

(Sanders, et al)

Research also tells that one of the greatest factors central office can contribute is to maintain a singular focus on improving instruction.

(Marzano and Waters, 2009)
Why do we need to change?
Teacher Evaluation Reform

Student Achievement/Growth and Instructional Practice

Instructional Practice must improve in order to raise student growth measures/student achievement
Purposes of Teacher Evaluation

Formative/Growth

Shape, form or improve teacher practice

Summative/Evaluation

Quality Assurance

Sources of Evidence
Here’s What We Know

- Student achievement will not improve unless teaching improves.
- Teachers working alone without feedback will not be able to improve no matter how much professional development they receive.
- The challenge of Teacher Evaluation is to create a system of continuous improvement of instruction, professional development, and feedback.
- Supervision needs to be frequent and focused on the improvement of instruction within a common language of Instruction.
Why Doing Teacher Evaluation Differently

What is the goal?
The Goal: An expectation that all teachers can increase their expertise from year to year which produces gains in student achievement from year to year with a powerful cumulative effect.
Marzano Causal Teacher Evaluation Model

- 4 Domains describing levels of teaching performance
- 60 Elements
- Validation studies
  - Correlational
  - Correctly identifies teachers’ performance levels
- Effect size studies for strategies within the framework

This is unique in the sense that these studies are designed to establish a direct causal link between elements of the model and student achievement.
Framework Comparison

**MARZANO CAUSAL MODEL**
- 4 Domains (60 elements)
- Emphasis on instruction
  - 41 elements in Classroom Strategies and Behaviors (68%)
  - Research indications of higher levels of observer accuracy due to specificity
  - Greater clarity for a common language of instruction
- Teachers are empowered
- Transparent processes
- More formative feedback
- Continuous growth

**TRADITIONAL MODEL**
- More broadly describes instruction
  - Difficulty to achieve observer accuracy and inter-rater reliability
  - Teachers could rate effective due to performance in non-instruction domains
- Principal more active and teacher more passive
- More compliance-oriented with summative feedback
Marzano Causal Model: Research Based Strategies

• Developmental continuum for teachers to implement research-based strategies
  – **Specific guidance** for teachers to improve instruction
  – **Evidences of sufficient implementation** to raise student learning
  – Guidance on the **appropriate instructional context** (when) to use each strategy to have the highest probability to raise student learning
Domain 1 identifies the 41 key strategies revealed by research for effective teaching presented in a robust, easy-to-understand model of instruction based on the Art and Science of Teaching.

All 41 Key Strategies are organized into 9 Design Questions, which are further organized into 3 Lesson Segments.

**Lesson Segments Involving Routine Events**
- **Learning Goals & Feedback**
  - What will I do to establish and communicate learning goals, track student progress, and celebrate success?
  - Providing Clear Learning Goals and Scales to Measure those Goals
  - Tracking Student Progress
  - Celebrating Student Success

- **Rules & Procedures**
  - What will I do to establish or maintain classroom rules and procedures?
  - Establishing Classroom Routine
  - Organizing Physical Layout of the Classroom for Learning

**Lesson Segments Addressing Content**
- **Interacting With New Knowledge**
  - What will I do to help students effectively interact with the new knowledge?
  - Identifying Critical Information
  - Organizing Students to Interact with New Knowledge
  - Previewing New Content
  - Chunking Content into "Digestible Bites"
  - Processing of New Information
  - Elaborating on New Information
  - Recording and Representing Knowledge
  - Reflecting on Learning

- **Practicing & Deepening Knowledge**
  - What will I do to help students practice and deepen their understanding of new knowledge?
  - Reviewing Content
  - Organizing Students to Practice and Deepen Knowledge
  - Using Homework
  - Examining Similarities and Differences
  - Examining Errors in Reasoning
  - Practicing Skills, Strategies, and Processes
  - Revising Knowledge

- **Generating & Testing Hypotheses**
  - What will I do to help students generate and test hypotheses about new knowledge?
  - Organizing Students for Cognitively Complex Tasks
  - Engaging Students in Cognitively Complex Tasks Involving Hypotheses Generating and Testing
  - Providing Resources and Guidance

**Lesson Segments Enacted on the Spot**
- **Student Engagement**
  - What will I do to engage students?
  - Noticing and Reacting when Students are Not Engaged
  - Using Academic Games
  - Managing Response Rates
  - Using Physical Movement
  - Maintaining a Lively Pace
  - Demonstrating Intensity and Enthusiasm
  - Using Friendly Controversy
  - Providing Opportunities for Students to Talk about Themselves
  - Presenting Unusual or Intriguing Information

- **Adherence to Rules & Procedures**
  - What will I do to recognize and acknowledge adherence and lack of adherence to classroom rules and procedures?
  - Demonstrating “Withness”
  - Applying Consequences
  - Acknowledging Adherence to Rules and Procedures

- **Teacher/Student Relationships**
  - What will I do to establish and maintain effective relationships with students?
  - Understanding Students’ Interests and Backgrounds
  - Using Behaviors that Indicate Affection for Students
  - Displaying Objectivity and Control

- **High Expectations**
  - What will I do to communicate high expectations for all students?
  - Demonstrating Value and Respect for Low Expectancy Students
  - Asking Questions of Low Expectancy Students
  - Probing Incorrect Answers with Low Expectancy Students

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**Marzano – Element Scale “Providing Clear Learning Goals and Scales”**

The teacher provides a clearly stated learning goal accompanied by scale or rubric that describes levels of performance relative to the learning goal.

<table>
<thead>
<tr>
<th>Providing clear learning goals and scales (rubrics)</th>
<th>Innovating</th>
<th>Applying</th>
<th>Developing</th>
<th>Beginning</th>
<th>Not Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adapts and creates new strategies for unique student needs and situations.</td>
<td>Provides a clearly stated learning goal accompanied by a scale or rubric that describes levels of performance and monitors students understanding of the learning goal and the levels of performance.</td>
<td>Provides a clearly stated learning goal accompanied by a scale or rubric that describes levels of performance.</td>
<td>Uses strategy incorrectly or with parts missing.</td>
<td>Strategy was called for but not exhibited.</td>
<td></td>
</tr>
</tbody>
</table>
Marzano – Element Evidences

The teacher provides a clearly stated learning goal accompanied by scale or rubric that describes levels of performance relative to the learning goal.

TEACHER EVIDENCE

- Teacher has a learning goal posted so that all students can see it
- The learning goal is a clear statement of knowledge or information as opposed to an activity or assignment
- Teacher makes reference to the learning goal throughout the lesson
- Teacher has a scale or rubric that relates to the learning goal posted so that all students can see it
- Teacher makes reference to the scale or rubric throughout the lesson

STUDENT EVIDENCE

- When asked, students can explain the learning goal for the lesson
- When asked, students can explain how their current activities relate to the learning goal
- When asked, students can explain the meaning of the levels of performance articulated in the scale or rubric
Marzano Causal Model: Research Based Strategies

**Effective teacher = student achievement**
(use of research-based strategies to achieve student learning results)

**Effective Principal = Effective Teachers**

Student achievement learning results are **lagging** indicators.

Teacher and student behavior is a **leading** indicator
(effective use of research-based instructional strategies)
Marzano Model Causal Links

- Deliberate Practice
- Teacher Behaviors
- Student Learning Gains
Deliberate Practice

Feedback

Practice
# Traditional vs. Causal Roles

<table>
<thead>
<tr>
<th>Roles</th>
<th>Principal</th>
<th>Teacher</th>
<th>Student</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Traditional System of Evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Causal Model of Evaluation</td>
<td></td>
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</tr>
</tbody>
</table>
The primary emphasis of supervision is to raise student achievement through the effective implementation of research-based instructional strategies.
### Marzano Causal Teacher Evaluation Model

When these strategies are used, here is the typical effect on raising student achievement (percentile gain corrected):

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Effect</th>
<th>Strategy</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note Taking</td>
<td>17%</td>
<td>Building Vocabulary</td>
<td>20%</td>
</tr>
<tr>
<td>Practice</td>
<td>14%</td>
<td>Effort and Recognition</td>
<td>14%</td>
</tr>
<tr>
<td>Setting Goals/Objectives</td>
<td>25%</td>
<td>Graphic Organizers</td>
<td>13%</td>
</tr>
<tr>
<td>Student Discussion/Chunking</td>
<td>17%</td>
<td>Homework</td>
<td>15%</td>
</tr>
<tr>
<td>Summarizing</td>
<td>19%</td>
<td>Identifying Similarities and Differences</td>
<td>20%</td>
</tr>
<tr>
<td>Tracking Student Progress and Using Scoring Scales</td>
<td>34%</td>
<td>Interactive Games</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Nonlinguistic Representations</td>
<td>17%</td>
</tr>
</tbody>
</table>
Research-Based Strategies

Research-based strategies have a high probability of raising student achievement if they are used:

- In the part (segment) or type of lesson that is appropriate for the strategy
- At the appropriate level of implementation
Are Your Teachers…

• Using these strategies at a sufficient level of implementation to raise student achievement?

• Using the appropriate strategies for different types of lessons or parts of a lesson?
Why is a Common Language/Model of Instruction Critical for Developing Effective Teachers?

• Definition of Effective Teaching so every leader and every teacher knows what effective teaching looks and sounds like
  – Accuracy and inter-rater reliability for supervisors, teacher leaders, coaches, and teachers

• Ability to provide professional development rigorously aligned to the Model of Instruction and measure progress in improving teacher practice

• Consistency for data collection to measure progress across classrooms, schools and districts
Common Language/Model of Instruction Must:

- Accurately reflect the complexity and sophistication of the teaching/learning process
- Identify the key strategies revealed by research for effective teaching within a framework of instruction
- Identify *which* research-based strategies are appropriate for different *types* of lessons or lesson segments
- Include rubrics with a clearly defined continuums of implementation and evidences sufficient to impact student learning
- Be flexible to allow districts to adapt and adopt the model to reflect local needs and priorities yet retain the Common Language
Common Language of Instruction Aligns Misaligned Systems

**MISALIGNED SYSTEM**
No Common Language or Model of Instruction

**ALIGNED SYSTEM**
Common Language or Model of Instruction
# Marzano Causal Teacher Evaluation Model

## Domain 1: Classroom Strategies and Behaviors (41 Elements)
- **Routine Segments (5 Elements)**
- **Content Segments (18 Elements)**
- **On the Spot Segments (18 Elements)**

## Domain 2: Planning and Preparing (8 Elements)
- **Lesson and Units (3 Elements)**
- **Use of Materials and Technology (2 Elements)**
- **Special Needs of Students (3 Elements)**

## Domain 3: Reflecting on Teaching (5 Elements)
- **Evaluating Personal Performance (3 Elements)**
- **Professional Growth Plan (2 Elements)**

## Domain 4: Collegiality and Professionalism (6 Elements)
- **Promoting a Positive Environment (2 Elements)**
- **Promoting Exchange of Ideas (2 Elements)**
- **Promoting District and School Development (2 Elements)**
Demonstration
Status Score Weighting System

- Recommended weight for each domain (60 Total Elements)
  - Domain 1: 68%, 41 Elements
  - Domain 2: 14%, 8 Elements
  - Domain 3: 8%, 5 Elements
  - Domain 4: 10%, 6 Elements
- Percentages can be adjusted by the district
Final Rating

Instructional Practice Score = Status Score combined with Deliberate Practice Score
### Rating Scale for Domain Elements (Marzano Scale)

<table>
<thead>
<tr>
<th></th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Formative ratings</strong></td>
<td>Innovating</td>
<td>Applying</td>
<td>Developing</td>
<td>Beginning</td>
<td>Not Using</td>
</tr>
<tr>
<td><strong>used for each domain element</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Proficiency Scale for All 3 Categories

<table>
<thead>
<tr>
<th>CI</th>
<th>Highly Effective (4)</th>
<th>Effective (3)</th>
<th>Developing (2)</th>
<th>Unsatisfactory (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1:</td>
<td>At least 65% at Level 4 and 1% at Level 1 or 0</td>
<td>At least 65% at Level 3 or higher</td>
<td>Less than 65% at Level 3 or higher and Less than 50% at Level 1, 0</td>
<td>Greater than or equal to 50% at Level 1, 0</td>
</tr>
<tr>
<td>D2:</td>
<td>At least 75% at Level 4 and 1% at Level 1 or 0</td>
<td>At least 75% at Level 3 or higher</td>
<td>Less than 75% at Level 3 or higher and Less than 50% at Level 1, 0</td>
<td>Greater than or equal to 50% at Level 1, 0</td>
</tr>
<tr>
<td>D3:</td>
<td>At least 85% at Level 4 and 1% at Level 1 or 0</td>
<td>At least 85% at Level 3 or higher</td>
<td>Less than 85% at Level 3 or higher and Less than 50% at Level 2, 1, 0</td>
<td>Greater than or equal to 50% at Level 2, 1, 0</td>
</tr>
</tbody>
</table>

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Marzano Teacher Evaluation

**FROM:**

- Compliance focused, annual reviews that are inflated and **lack** specific guidance for instructional improvement
- Misaligned system **without** specificity in the common language of instruction
- Ambiguity and subjectivity due to the lack of specificity
- Lacks connections to student achievement gains

**TO:**

- Formative and summative process that is timely, **specific**, and honors growth over time
- Coherent research-based **common language of instruction** with clear and objective measures and teacher and student evidences
- **Clarity and consistency**, from the newest teacher to the most veteran practitioners and supports **accuracy** for observers
- Causal links to **raising** student achievement
Implementation Services from Learning Sciences International

- Redevelopment of teacher evaluation procedures to reflect the causal model
- Leaders of Learning – observer and scoring training program for both administrators and informal feedback loops with coaches and teacher leaders
- Certified staff developer program
- iObservation instructional improvement data system for teacher and principal growth, development and evaluation
- Observer certification program
CONTACT INFORMATION
Email: wholsinger@learningsciences.com
Phone: 717-817-7232

www.MarzanoEvaluation.com
www.iObservation.com
www.LearningSciences.com