Dr. Robert Marzano’s
Evaluation Model Alignment to
Virginia Teaching Standards

*Exclusive partners with Dr. Robert J. Marzano
for the Causal Teacher Evaluation Model*

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Preface

Recent federal initiatives (Race to the Top) and state legislation have called for rigorous, transparent, and fair evaluation systems that differentiate teacher effectiveness based on student achievement as described by value-added models. Subsequently, there is an increased need for a teacher evaluation model that also includes a comprehensive robust, and research based description of teacher effectiveness that can be measured using observation protocols, classroom artifacts, portfolios, student work, and professional growth plans.

The goal of an effective evaluation system is for teachers to incrementally increase their expertise in teaching year to year and, therefore, incrementally increase their ability to raise student learning gains year to year. Dr. Marzano’s Causal Teacher Evaluation Model (herein referred to as the Marzano Evaluation Model) is based on his acclaimed Art and Science of Teaching Framework, which identifies the instructional strategies identified by research to increase student learning gains. The Marzano Evaluation Model closely aligns with state teaching standards through the development of clear criteria for success and a mechanism (student data module) that ties student achievement to teacher evaluation using data closest to the classroom.

The Virginia Teaching Standards broadly describe what teachers need to know and be able to do while the Marzano Evaluation Model provides a means for teachers translate the standards into their daily practice.
Marzano Causal Evaluation Model

Domain 1: Classroom Strategies and Behaviors

**Lesson Segments Involving Routine Events**

- **DQ1: Communicating Learning Goals and Feedback**
  1. Providing Clear Learning Goals and Scales (Rubrics)
  2. Tracking Student Progress
  3. Celebrating Success

- **DQ6: Establishing Rules and Procedures**
  4. Establishing Classroom Routines
  5. Organizing the Physical Layout of the Classroom

**Lesson Segments Addressing Content**

- **DQ2: Helping Students Interact with New Knowledge**
  6. Identifying Critical Information
  7. Organizing Students to Interact with New Knowledge
  8. Previewing New Content
  9. Chunking Content into “Digestible Bites”
  10. Processing of New Information
  11. Elaborating on New Information
  12. Recording and Representing Knowledge
  13. Reflecting on Learning

- **DQ3: Helping Students Practice and Deepen New Knowledge**
  14. Reviewing Content
  15. Organizing Students to Practice and Deepen Knowledge
  16. Using Homework
  17. Examining Similarities and Differences
  18. Examining Errors in Reasoning
  19. Practicing Skills, Strategies, and Processes
  20. Revising Knowledge

**Lesson Segments Enacted on the Spot**

- **DQ5: Engaging Students**
  24. Noticing When Students are Not Engaged
  25. Using Academic Games
  26. Managing Response Rates
  27. Using Physical Movement
  28. Maintaining a Lively Pace
  29. Demonstrating Intensity and Enthusiasm
  30. Using Friendly Controversy
  31. Providing Opportunities for Students to Talk about Themselves
  32. Presenting Unusual or Intriguing Information

- **DQ7: Recognizing Adherence to Rules and Procedures**
  33. Demonstrating “Withitness”
  34. Applying Consequences for Lack of Adherence to Rules and Procedures
  35. Acknowledging Adherence to Rules and Procedures

- **DQ8: Establishing and Maintaining Effective Relationships with Students**
  36. Understanding Students’ Interests and Background
  37. Using Verbal and Nonverbal Behaviors that Indicate Affection for Students
  38. Displaying Objectivity and Control

- **DQ9: Communicating High Expectations for All Students**
  39. Demonstrating Value and Respect for Low Expectancy Students
  40. Asking Questions of Low Expectancy Students
  41. Probing Incorrect Answers with Low Expectancy Students

**Note:** DQ referrers to Design Questions in the Marzano Art and Science of Teaching Framework. The nine (9) DQs organize the 41 elements in Domain 1.

The final Design Question, DQ10: Developing Effective Lessons Organized into a Cohesive Unit is contained in Domain 2: Planning and Preparing.
## Domain 2: Planning and Preparing

### Planning and Preparing

#### Planning and Preparing for Lessons and Units
- 42. Effective Scaffolding of Information with Lessons
- 43. Lessons within Units
- 44. Attention to Established Content Standards

#### Planning and Preparing for Use of Resources and Technology
- 45. Use of Available Traditional Resources
- 46. Use of Available Technology

#### Planning and Preparing for the Needs of English Language Learners
- 47. Needs of English Language Learners

#### Planning and Preparing for the Needs of Students Receiving Special Education
- 48. Needs of Students Receiving Special Education

#### Planning and Preparing for the Needs of Students Who Lack Support for Schooling
- 49. Needs of Students Who Lack Support for Schooling

## Domain 3: Reflecting on Teaching

### Reflecting on Teaching

#### Evaluating Personal Performance
- 50. Identifying Areas of Pedagogical Strength and Weakness
- 51. Evaluating the Effectiveness of Individual Lessons and Units
- 52. Evaluating the Effectiveness of Specific Pedagogical Strategies and Behaviors

#### Developing and Implementing a Professional Growth Plan
- 53. Developing a Written Growth and Development Plan
- 54. Monitoring Progress Relative to the Professional Growth and Development Plan

## Domain 4: Collegiality and Professionalism

### Collegiality and Professionalism

#### Promoting a Positive Environment
- 55. Promoting Positive Interactions with Colleagues
- 56. Promoting Positive Interactions about Students and Parents

#### Promoting Exchange of Ideas and Strategies
- 57. Seeking Mentorship for Areas of Need or Interest
- 58. Mentoring Other Teachers and Sharing Ideas and Strategies

#### Promoting District and School Development
- 59. Adhering to District and School Rule and Procedures
- 60. Participating in District and School Initiatives
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<th>Virginia Teaching Standards</th>
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<td><strong>DOMAIN 1: CLASSROOM STRATEGIES AND BEHAVIORS</strong></td>
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<td><strong>I. Routine Segments</strong></td>
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<tr>
<td><strong>Design Question #1</strong>: What will I do to establish and communicate learning goals, track student progress, and celebrate success?</td>
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<tr>
<td>1. Providing clear learning goals and scales (rubrics)</td>
<td><strong>Element I.5</strong></td>
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| 2. Tracking student progress                  | **Element I.3**
|                                               | **Element I.4**
|                                               | **Element I.5** |
| 3. Celebrating success                        | **Element I.5** |
| **Design Question #6**: What will I do to establish and maintain classroom rules and procedures? |                           |
| 4. Establishing classroom rules and procedures | **Element III.1**
|                                               | **Element III.2** |
| 5. Organizing the physical layout of the classroom | **Element II.4**
|                                               | **Element III.1**
|                                               | **Element III.2** |
| **II. Content Segments**                      |                           |
| **Design Question #2**: What will I do to help students effectively interact with new knowledge? |                           |
| 6. Identifying critical information           | **Element I.1**
|                                               | **Element II.1**
|                                               | **Element II.2**
|                                               | **Element II.3**
|                                               | **Element II.4** |
| 7. Organizing students to interact with new knowledge | **Element I.1**
|                                               | **Element II.1**
|                                               | **Element II.2**
|                                               | **Element III.3**
|                                               | **Element III.4** |
| 8. Previewing new content                     | **Element I.1** |
| 9. Chunking content into “digestible bites”   | **Element II.1** |
| 10. Processing new information                | **Element II.2** |
| 11. Elaborating on new information            | **Element II.3** |
| 12. Recording and representing knowledge      | **Element II.4** |
| 13. Reflecting on learning                   |                           |
| **Design Question #3**: What will I do to help student practice and deepen their understanding of new knowledge? |                           |
| 14. Reviewing content                         | **Element I.1** |
| 15. Organizing students to practice and deepen knowledge | **Element II.1** |
| 16. Using homework                            | **Element II.2** |
| 17. Examining similarities and differences    | **Element II.3** |
| 18. Examining errors in reasoning             | **Element II.4** |
| 19. Practicing skills, strategies, and processes |                           |
| 20. Revising knowledge                        |                           |
### Design Question #4: What will I do to help students generate and test hypotheses about new knowledge?

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<td>Organizing students for cognitively complex tasks</td>
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<td>23.</td>
<td>Providing resources and guidance</td>
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### III. Segments Enacted on the Spot

### Design Question #5: What will I do to engage students?

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<tr>
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<td>Noticing when students are not engaged</td>
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<td>Using academic games</td>
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<td>27.</td>
<td>Using physical movement</td>
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<td>Maintaining a lively pace</td>
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<td>29.</td>
<td>Demonstrating intensity and enthusiasm</td>
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<td>31.</td>
<td>Providing opportunities for students to talk about themselves</td>
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<td>32.</td>
<td>Presenting unusual or intriguing information</td>
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### Design Question #7: What will I do to recognize and acknowledge adherence or lack of adherence to rules and procedures?

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<td>33.</td>
<td>Demonstrating “withitness”</td>
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<td>Applying consequences for lack of adherence to rules and procedures</td>
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<th>Design Question #8: What will I do to establish and maintain effective relationships with students?</th>
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<tr>
<td>35. Acknowledging adherence to rules and procedures</td>
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<td>36. Understanding students’ interests and background</td>
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<th>Design Question #9: What will I do to communicate high expectations for all students?</th>
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<td>39. Demonstrating value and respect for low expectancy students</td>
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<td>41. Probing incorrect answers with low expectancy students</td>
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### DOMAIN 2: PLANNING AND PREPARING

#### I. Planning and Preparing for Lessons and Units

| 42. Planning and preparing for effective scaffolding of information within lessons | Element I.1 |
| 43. Planning and preparing for lessons within units that progress toward a deep understanding and transfer of content | Element I.2, Element I.3 |
| 44. Planning and preparing for appropriate attention to established content standards | Element I.4, Element I.5 |

#### II. Planning and Preparing for Use of Materials and Technology

| 45. Planning and preparing for the use of available traditional resources for upcoming units and lessons (e.g. manipulatives or video tapes) | Element I.1, Element I.2 |
| 46. Planning for the use of available technology such as interactive white boards, voting technologies and one-to-one computer | Element I.3, Element I.4, Element I.5 |
### III. Planning and Preparing for Needs of English Language Learners

| 47. Needs of English Language Learners | Element I.1 | Element I.2 | Element I.3 | Element I.4 | Element I.5 |

### IV. Planning and Preparing for Needs of Students Receiving Special Education


### V. Planning and Preparing for Needs of Students Who Lack Support for Schooling


### DOMAIN 3: REFLECTING ON TEACHING

#### I. Evaluating Personal Performance

| 50. Identifying specific areas of pedagogical strength and weakness | Element IV.2 |
| 51. Evaluating the effectiveness of individual lessons and units | Element I.4 |
| 52. Evaluating the effectiveness of specific pedagogical strategies and behaviors across different categories of students (e.g., different socio-economic groups or different ethnic groups) | Element I.4 |

#### II. Developing and Implementing a Professional Growth Plan

| 53. Developing a written growth and development plan | Not Evident |
| 54. Monitoring progress relative to the professional growth plan | Not Evident |

### DOMAIN 4: COLLEGIALLY AND PROFESSIONALISM

#### I. Promoting a Positive Environment

| 55. Promoting positive interactions about colleagues | Element IV.3 |
| 56. Promoting positive interactions about students | Element III.3 |

#### II. Promoting Exchange of Ideas and Strategies

| 57. Seeking mentorship for areas of need or interest | Element IV.2 |
| 58. Mentoring other teachers and sharing ideas and strategies | Element IV.3 |

#### III. Promoting District and School Development

| 59. Adhering to district and school rules and procedures | Element V.1 |

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<td>60. Participating in district and school initiatives</td>
<td>Element IV.2 Element V.1 Element V.2 Element V.3 Element V.4</td>
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Virginia Teaching Standards

Major Categories of Evaluation Criteria for Teachers

I. Planning and Assessment
Responsibilities for evaluating and providing students with feedback that encourages student progress and measures student achievement. Based on a variety of assessments, content knowledge, and student knowledge, the teacher plans appropriate instruction.

- Element I.1: The teacher designs coherent instruction based upon knowledge of subject matter, students, the community, and curriculum goals.
- Element I.2: The teacher plans instruction to achieve desired objectives that reflect the Virginia Standards of Learning and division curriculum guidelines.
- Element I.3: The teacher diagnoses individual, group, and program needs and selects appropriate materials and resources to match the abilities and needs of all students.
- Element I.4: The teacher uses a variety of assessment strategies and instruments to make both short-term and long-range instructional decisions to improve student learning.
- Element I.5: The teacher identifies and communicates specific student performance expectations and documents student learning gains using appropriate assessment instruments.

II. Instruction
Critical skills that determine the quality of classroom instruction. The major responsibilities include implementing a variety of activities consistent with instructional objectives and selecting instructional methods compatible with students’ abilities, prior knowledge, and learning styles.

- Element II.1: The teacher understands the central concepts, tools of inquiry, and structures of the discipline he or she teaches and creates learning experiences that make the subject matter meaningful for all students.
- Element II.2: The teacher understands how students differ in their approaches to learning and is able to differentiate instruction to meet diverse student needs.
- Element II.3: The teacher uses comprehensive materials, technology, and resources that promote the development of critical thinking, problem solving, and performance skills.
- Element II.4: The teacher selects, evaluates, and refines a variety of teaching methods and instructional strategies for the active engagement of students and improvement of student learning.

III. Safety and Learning Environment
Teachers’ responsibilities for planning and demonstrating effective routines and procedures that create an organized and positive learning environment.

- Element III.1: The teacher actively implements a discipline policy that fosters a safe and positive environment for students and staff.
- Element III.2: The teacher manages classroom procedures to maximize academic learning time.
- Element III.3: The teacher establishes and maintains rapport with students.
- Element III.4: The teacher creates a supportive learning environment for all students that encourages social interaction, active engagement in learning, and self-motivation.
IV. Communication and Community Relations
Responsibilities of teachers to use effective communication strategies in working with students, parents, and members of the community to promote broad support for student learning.

- Element IV.1: The teacher uses effective verbal, nonverbal, and media communication techniques to foster positive interactions in the classroom.
- Element IV.2: The teacher forges partnerships with families to promote student learning at home and in the school.
- Element IV.3: The teacher works collaboratively with staff, families, and community resources to support the success of a diverse student population.

V. Professionalism
Basic responsibilities of all professional educators and defines the responsibilities for demonstrating a commitment to professional ethics and growth and for complying with school divisions’ policies and procedures.

- Element V.1: The teacher models professional, moral, and ethical standards as well as personal integrity in all interactions.
- Element V.2: The teacher takes responsibility for and participates in a meaningful and continuous process of professional development that results in the enhancement of student learning.
- Element V.3: The teacher works in a collegial and collaborative manner with peers, school personnel, and the community to promote and support student learning.
- Element V.4: The teacher provides service to the profession, the division, and the community.
Research Base and Validation Studies on the Marzano Evaluation Model

Research Base and Validation Studies on the Marzano Evaluation Model
The Marzano Evaluation Model is currently being used by the Florida Department of Education (DOE) as a model that districts can use or adapt as their evaluation model. That Marzano Evaluation Model is based on a number of previous, related works that include: *What Works in Schools* (Marzano, 2003), *Classroom Instruction that Works* (Marzano, Pickering, & Pollock, 2001), *Classroom Management that Works* (Marzano, Pickering, & Marzano, 2003), *Classroom Assessment and Grading that Work* (Marzano, 2006), *The Art and Science of Teaching* (Marzano, 2007), *Effective Supervision: Supporting the Art and Science of Teaching* (Marzano, Frontier, & Livingston, 2011). Each of these works was generated from a synthesis of the research and theory. Thus the mode can be considered an aggregation of the research on those elements that have traditionally been shown to correlate with student academic achievement.

The model includes four domains:

- Domain 1: Classroom Strategies and Behaviors
- Domain 2: Preparing and Planning
- Domain 3: Reflecting on Teaching
- Domain 4: Collegiality and Professionalism

The four domains include 60 elements: 41 elements in Domain 1, 8 elements in Domain 2, 5 elements in Domain 3 and 6 elements in Domain 4. For a detailed discussion of these elements see *Effective Supervision: Supporting the Art and Science of Teaching* (Marzano, Frontier, & Livingston, 2011).

**Domain 1** contains 41 elements (5 + 18 + 18); **Domain 2** contains 8 elements (3 + 2 + 3); **Domain 3** contains 5 elements (3 + 2) and **Domain 4** contains 6 elements (2 + 2 + 2). Given that 41 of the 60 elements in the model are from Domain 1, the clear emphasis in the Marzano model is what occurs in the classroom—the strategies and behaviors teachers use to enhance student achievement. This emphasis differentiates it from some other teacher evaluation models.

Teacher status and growth can be assessed in each component of the model in a manner that is consistent with the Florida DOE guidelines and the requirements of Race to the Top legislation.

The Research Base from Which the Model Was Developed
Each of the works (cited above) from which the model was developed report substantial research on the elements they address. For example, *The Art and Science of Teaching* includes over 25 tables reporting the research on the various elements of Domain 1. These tables report the findings from meta-analytic studies and the average effect sizes computed in these studies. In all, over 5,000 studies (i.e., effect sizes) are covered in the tables representing research over the last five decades. The same can be said for the other titles listed above. Thus, one can say that the model was initially based on thousands of studies that span multiple decades and these studies were chronicled and catalogued in books that have been widely disseminated in the United States. Specifically, over 2,000,000 copies of the books cited above have been purchased and disseminated to K-12 educators across the United States.

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Experimental/Control Studies

Perhaps one of the more unique aspects of the research on this model is that it has a growing number of experimental/control studies that have been conducted by practicing teachers on the effectiveness of specific strategies in their classrooms. This is unusual in the sense that these studies are designed to establish a direct causal link between elements of the model and student achievement. Studies that use correlation analysis techniques (see next section) can establish a link between elements of a model and student achievement; however, causality cannot be easily inferred. Other evaluation models currently used throughout the country only have correlational data regarding the relationship between their elements and student achievement.

To date over 300 experimental/control studies have been conducted. Those studies involved over 14,000 students, 300 teachers, across 38 schools in 14 districts. The average effect size for strategies addressed in the studies was .42 with some studies reporting effect sizes of 2.00 and higher. An average effect size of .42 is associated with a 16 percentile point gain in student achievement. Stated differently: on the average, when teachers use the classroom strategies and behaviors in the Marzano Evaluation Model, their typical student achievement increased by 16 percentile points. However, great gains (i.e., those associated with an effect size of 2.00) can be realized if specific strategies are use in specific ways.

Correlational Studies

As mentioned above, correlational studies are the most common approach to examining the validity of an evaluation model. Such studies have been, and continue to be conducted, on various elements of the Marzano Evaluation Model. For example, a study was recently conducted in the state of Oklahoma as a part of their examination of elements that are related to student achievement in K-12 schools (see What Works in Oklahoma Schools: Phase I Report and What Works in Oklahoma Schools: Phase II Report, by Marzano Research Laboratory, 2010 and 2011 respectively). Those studies involved 59 schools, 117 teachers and over 13,000 K-12 students. Collectively, those reports indicate positive relationships with various elements of the Marzano Evaluation Model across the domains. Specific emphasis was placed on Domain 1 particularly in the Phase II report. Using state mathematics and reading test data, 96% of the 82 correlations (i.e., 41 correlations for mathematics and 41 for reading) were found to be positive with some as high as .40 and greater. A .40 correlation translates to an effect size (i.e., standardized mean difference) of .87 which is associated with a 31 percentile point gain in student achievement. These studies also aggregated data across the nine design questions in Domain 1. All correlations were positive for this aggregated data. Seven of those correlations ranged from .33 to .40. These correlations translate into effect sizes of .70 and higher. High correlations such as these were also reported for the total number of Domain 1 strategies teachers used in a school. Specifically the number of Domain 1 strategies teachers used in school had a .35 correlation with reaching proficiency and a .26 correlation with mathematics proficiency.

Technology Studies

Another unique aspect of the research conducted on the model is that its effects have been examined in the context of technology. For example, a two year study was conducted to determine (in part) the relationship between selected elements from Domain 1 and the effectiveness of interactive whiteboards in enhancing student achievement (see Final Report: A Second Year Evaluation Study of Promethean ActivClassroom by Haystead and Marzano, 2010). In all, 131 experimental/control studies were conducted across the spectrum of grade levels. Selected elements of Domain 1 were correlated with the effect sizes for use of the interactive whiteboards. All correlations for Domain 1 elements were positive.
with some as high as .70. This implies that the effectiveness of the interactive whiteboards as used in these 131 studies was greatly enhanced by the use of Domain 1 strategies.

Summary
In summary, the Marzano Evaluation Model was designed using literally thousands of studies conducted over the past five or more decades and published in books that have been widely used by K-12 educators. In addition, experimental/control studies have been conducted that establish a more direct causal linkage with enhanced student achievement that can be made with other types of data analysis. Correlation studies (the more typical approach to examining the viability of a model) have also been conducted indicating positive correlations between the elements of the model and student mathematics and reading achievement. Finally, the model has been studied as to its effects on the use of technology (i.e., interactive whiteboards) and found it to be highly correlated with the effectiveness of that technology.

References


