



The Marzano Causal Teacher Evaluation Model
Alignment to the New Jersey Professional Standards for
Teachers and School Leaders

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

Learning Sciences International
175 Cornell Road, Suite 18
Blairsville, PA 15717
www.learningsciences.com

Contents

Preface	3
Marzano Causal Teacher Evaluation Model Map of Domains 1-4	4
The Marzano Teacher Evaluation Model Alignment to the New Jersey Professional Standards for Teachers and School Leaders	6
New Jersey Professional Standards for Teachers and School Leaders	13
Standard 1: Subject Matter Knowledge.....	13
Standard 2: Human Growth and Development.....	13
Standard 3: Diverse Learners.....	14
Standard 4: Instructional Planning and Strategies.....	15
Standard 5: Assessment.....	16
Standard 6: Learning Environment.....	16
Standard 7: Special Needs.....	17
Standard 8: Communication.....	18
Standard 9: Collaboration and Partnerships.....	18
Standard 10: Professional Development.....	19
Research Base and Validation Studies on the Marzano Causal Teacher Evaluation Model, April 2011	20
The Research Base from which the Model was Developed.....	20
Experimental/Control Studies.....	21
Correlational Studies.....	21
Technology Studies.....	21
Summary.....	22
References.....	22

Preface

Federal initiatives (e.g. Race to the Top) and state legislation call 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 measure the effectiveness of teachers 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 Teacher Evaluation Model*) is based on his acclaimed Art and Science of Teaching framework, which defines instructional strategies identified by research to increase student learning gains. The Marzano Teacher Evaluation Model closely aligns with state teaching standards through the development of clear criteria for success and a student data module that ties student achievement to teacher evaluation using data closest to the classroom.

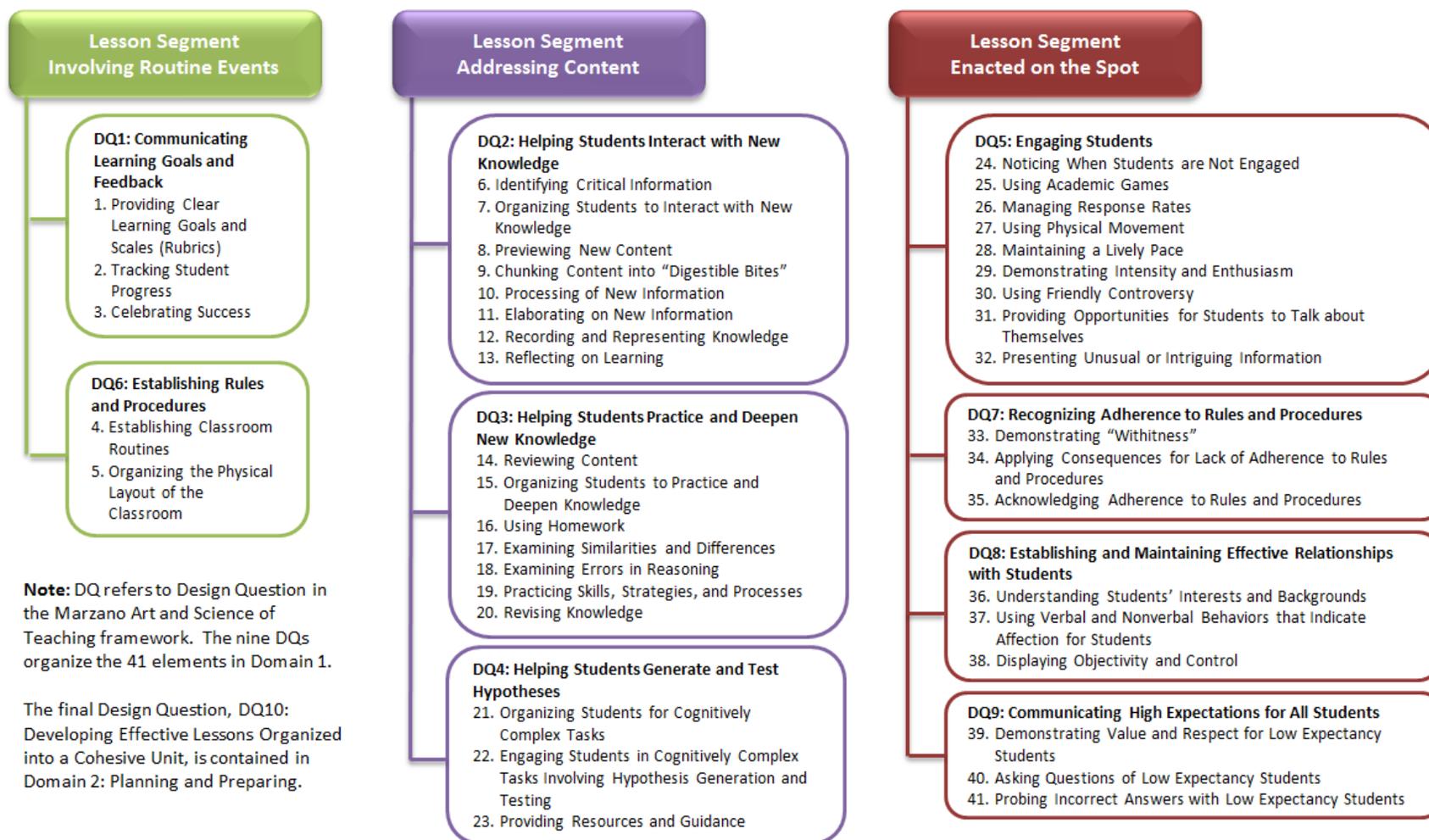
The New Jersey Professional Standards for Teachers and School Leaders¹ broadly describe what teachers need to know and be able to do, while the Marzano Teacher Evaluation Model provides a means for teachers to translate the standards into their daily practice.

¹ Source: New Jersey Department of Education, *New Jersey Professional Standards for Teachers and School Leaders* (July 2004).

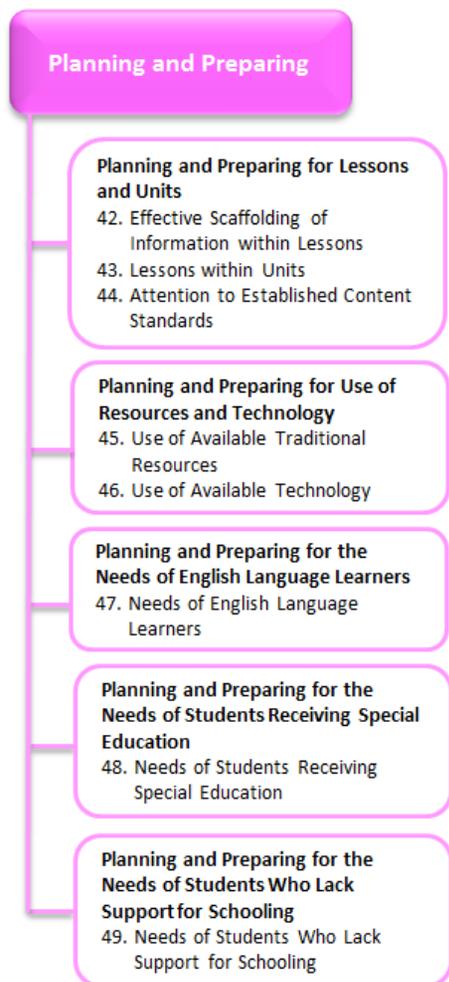
Marzano Causal Teacher Evaluation Model Map of Domains 1-4

Domain 1: Classroom Strategies and Behaviors

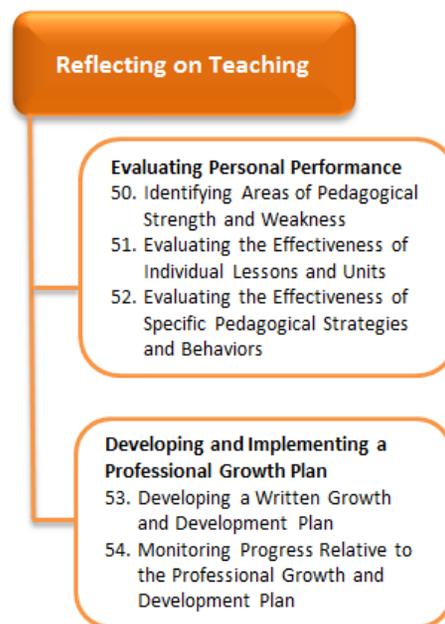
Domain 1 is based on the Art and Science of Teaching Framework and identifies the 41 elements or instructional categories that happen in the classroom. The 41 instructional categories are organized into 9 Design Questions (DQs) and further grouped into 3 Lesson Segments to define the Observation and Feedback Protocol.



Domain 2: Planning and Preparing



Domain 3: Reflecting on Teaching



Domain 4: Collegiality and Professionalism



The Marzano Teacher Evaluation Model Alignment to the New Jersey Professional Standards for Teachers and School Leaders

Marzano Evaluation Model Domains 1, 2, 3, and 4	New Jersey Professional Standards for Teachers and School Leaders
DOMAIN 1: CLASSROOM STRATEGIES AND BEHAVIORS	
I. Lesson Segments Involving Routine Events	
Design Question #1: What will I do to establish and communicate learning goals, track student progress, and celebrate success?	
1. Providing Clear Learning Goals and Scales (Rubrics)	Element 4.9 Element 7.4 Element 8.1
2. Tracking Student Progress	Element 4.11 Elements 5.1 through 5.7 Element 7.5
3. Celebrating Success	Element 2.5 Element 5.3 Element 5.5 Element 5.7 Element 6.4 Elements 8.1 through 8.2
Design Question #6: What will I do to establish and maintain classroom rules and procedures?	
4. Establishing Classroom Routines	Elements 6.1 through 6.6 Element 6.10
5. Organizing the Physical Layout of the Classroom	Element 6.1
II. Lesson Segments Addressing Content	
Design Question #2: What will I do to help students effectively interact with new knowledge?	
6. Identifying Critical Information	Elements 1.1 through 1.8
7. Organizing Students to Interact with New Knowledge	Elements 2.1 through 2.9
8. Previewing New Content	Element 7.7
9. Chunking Content into “Digestible Bites”	Elements 8.1 through 8.8
10. Processing of New Information	
11. Elaborating on New Information	
12. Recording and Representing Knowledge	
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	Elements 1.1 through 1.3 Element 1.8

15. Organizing Students to Practice and Deepen Knowledge	Element 2.1 Element 2.3 Element 2.9 Elements 4.3 through 4.4 Element 4.6 Elements 4.9 through 4.10 Element 4.12 Elements 6.11 through 6.12 Elements 8.5 through 8.8
16. Using Homework	Elements 4.1 through 4.5 Elements 4.8 through 4.12 Element 7.8
17. Examining Similarities and Differences	Element 1.1 Elements 1.3 through 1.5 Element 1.8 Element 2.1 Element 2.3 Element 2.6 Element 2.9 Elements 4.4 through 4.6 Elements 4.9 through 4.12
18. Examining Errors in Reasoning	Elements 1.1 through 1.5 Elements 1.7 through 1.8 Elements 2.1 through 2.3 Element 2.6 Element 3.1 Elements 4.4 through 4.6 Elements 4.9 through 4.12
19. Practicing Skills, Strategies, and Processes	Elements 1.1 through 1.4 Elements 1.7 through 1.9 Elements 2.1 through 2.8 Element 3.1 Elements 4.4 through 4.6 Elements 4.9 through 4.12 Elements 6.11 through 6.12
20. Revising Knowledge	Elements 2.3 through 2.9 Elements 8.4 through 8.8
Design Question #4: What will I do to help students generate and test hypotheses about new knowledge?	
21. Organizing Students for Cognitively Complex Tasks	Elements 1.1 through 1.8 Element 2.1

	Element 2.3 Element 2.9 Elements 6.11 through 6.12 Element 8.5 Element 8.7
22. Engaging Students in Cognitively Complex Tasks Involving Hypothesis Generation and Testing	Element 1.4 Element 1.7 Element 2.3 Element 2.7 Elements 6.11 through 6.12 Elements 8.1 through 8.8
23. Providing Resources and Guidance	Elements 1.5 through 1.7 Element 1.9 Element 2.3 Elements 4.1 through 4.12 Element 6.6 Element 7.7 Elements 8.1 through 8.8
III. Lesson Segments Enacted on the Spot	
Design Question #5: What will I do to engage students?	
24. Noticing When Students are Not Engaged	Element 2.3 Element 2.5 Element 7.8 Elements 8.1 through 8.2 Element 8.8
25. Using Academic Games	Element 1.1 Elements 1.3 through 1.4 Element 1.6 Element 2.3 Elements 2.6 through 2.7 Element 2.9 Elements 4.2 through 4.12 Element 6.3 Element 6.6 Element 6.9 Element 7.4 Element 7.7 Element 8.7
26. Managing Response Rates	Element 1.2 Element 1.7 Element 2.3

	Element 2.5 Element 2.8 Elements 3.2 through 3.3 Element 3.9 Elements 4.1 through 4.6 Element 4.11 Element 5.3 through 5.4 Element 5.7 Elements 7.7 through 7.8 Element 8.3 Element 8.6 through 8.8
27. Using Physical Movement	Element 1.1 Element 2.3 Element 4.1 Element 4.4 Element 4.9 Element 4.12 Element 6.3 Element 7.4 Element 7.7
28. Maintaining a Lively Pace	Element 1.6 Element 4.4 Element 4.8 Element 6.11 Element 7.8
29. Demonstrating Intensity and Enthusiasm	Element 1.6 Element 4.12
30. Using Friendly Controversy	Element 1.5 Elements 2.1 through 2.2 Element 8.2
31. Providing Opportunities for Students to Talk about Themselves	Element 1.5 Elements 2.1 through 2.3 Element 2.5 Element 2.7 Elements 3.1 through 3.10 Elements 8.1 through 8.4 Elements 8.6 through 8.8
32. Presenting Unusual or Intriguing Information	Element 4.6 Element 4.9 through 4.10 Element 4.12 Element 8.7
Design Question #7: What will I do to recognize and acknowledge adherence or lack of adherence to rules and procedures?	

33. Demonstrating “Withitness”	Elements 6.1 through 6.10
34. Applying Consequences for Lack of Adherence to Rules and Procedures	
35. Acknowledging Adherence to Rules and Procedures	
Design Question #8: What will I do to establish and maintain effective relationships with students?	
36. Understanding Students’ Interests and Background	Elements 2.1 through 2.3 Element 2.5 Element 2.7 Elements 3.1 through 3.8 Element 3.10 Element 7.4 Elements 8.2 through 8.3 Element 8.8
37. Using Verbal and Nonverbal Behaviors that Indicate Affection for Students	Elements 8.1 through 8.4 Element 8.6
38. Displaying Objectivity and Control	Element 6.8 Elements 8.1 through 8.3 Element 8.6
Design Question #9: What will I do to communicate high expectations for all students?	
39. Demonstrating Value and Respect for Low Expectancy Students	Elements 2.1 through 2.5 Element 2.7 through 2.9 Element 3.1 through 3.10 Element 7.3
40. Asking Questions of Low Expectancy Students	Element 1.1 Element 1.5 Elements 2.2 through 2.3 Element 2.5 Elements 2.7 through 2.8 Element 7.3
41. Probing Incorrect Answers with Low Expectancy Students	Element 1.1 Element 1.5 Elements 2.2 through 2.3 Element 2.5 Element 2.7 through 2.8 Element 7.3
DOMAIN 2: PLANNING AND PREPARING	
I. Planning and Preparing for Lessons and Units	
42. Effective Scaffolding of Information with Lessons	Element 1.1
43. Lessons within Units	Elements 1.3 through 1.4
44. Attention to Established Content Standards	Element 1.9 Elements 2.1 through 2.3

	Element 2.6 Elements 3.1 through 3.6 Elements 4.1 through 4.12
II. Planning and Preparing for Use of Resources and Technology	
45. Use of Available Traditional Resources	Element 1.2
46. Use of Available Technology	Element 1.9 Element 3.10 Element 4.2 Element 4.8 Element 4.10 Element 7.2 Element 7.8 Element 9.7
III. Planning and Preparing for Needs of English Language Learners	
47. Needs of English Language Learners	Elements 1.3 through 1.4 Elements 2.1 through 2.3 Element 2.9 Elements 3.1 through 3.10 Elements 4.1 through 4.12
IV. Planning and Preparing for Needs of Students Receiving Special Education	
48. Needs of Students Receiving Special Education	Elements 7.1 through 7.8
V. Planning and Preparing for Needs of Students Who Lack Support for Schooling	
49. Needs of Students Who Lack Support for Schooling	Elements 1.1 through 1.9 Elements 2.1 through 2.7 Element 2.9 Elements 3.1 through 3.10
DOMAIN 3: REFLECTING ON TEACHING	
I. Evaluating Personal Performance	
50. Identifying Areas of Pedagogical Strength and Weakness	Elements 10.1 through 10.3 Element 10.5
51. Evaluating the Effectiveness of Individual Lessons and Units	Element 1.9 Element 7.4 Element 7.5 Elements 10.1 through 10.3 Element 10.5
52. Evaluating the Effectiveness of Specific Pedagogical Strategies and Behaviors	Element 2.1 Element 2.3

	Elements 7.4 through 7.5 Elements 10.1 through 10.3 Element 10.5
II. Developing and Implementing a Professional Growth Plan	
53. Developing a Written Growth and Development Plan	Element 10.1 Element 10.3 Elements 10.5 through 10.6
54. Monitoring Progress Relative to the Professional Growth and Development Plan	Elements 10.1 through 10.3
DOMAIN 4: COLLEGIALITY AND PROFESSIONALISM	
I. Promoting a Positive Environment	
55. Promoting Positive Interactions with Colleagues	Elements 10.2 through 10.4 Elements 10.6 through 10.7
56. Promoting Positive Interactions about Students and Parents	Elements 3.1 through 3.8 Elements 6.4 through 6.6 Element 8.8 Elements 9.1 through 9.9
II. Promoting Exchange of Ideas and Strategies	
57. Seeking Mentorship for Areas of Need or Interest	Elements 10.1 through 10.4 Element 10.6
58. Mentoring Other Teachers and Sharing Ideas and Strategies	Elements 10.1 through 10.4
III. Promoting District and School Development	
59. Adhering to District and School Rule and Procedures	Element 7.1
60. Participating in District and School Initiatives	Element 9.2 Element 10.2 Element 10.7

New Jersey Professional Standards for Teachers and School Leaders

Standard 1: Subject Matter Knowledge

Teachers shall understand the central concepts, tools of inquiry, structures of the discipline, especially as they relate to the New Jersey Core Curriculum Content Standards (CCCS), and design developmentally appropriate learning experiences making the subject matter accessible and meaningful to all students.

KNOWLEDGE

Teachers know and understand:

- Element 1.1: In-depth the subject matter they plan to teach and the relationship of that discipline to other content areas
- Element 1.2: The evolving nature of the discipline or subject matter knowledge and the need for keeping abreast of new ideas and understanding of the discipline
- Element 1.3: That literacy skills and processes are applicable in all content areas and help students to develop the knowledge, skills and dispositions that enable them to construct meaning and make sense of the world through reading, writing, listening, speaking and viewing
- Element 1.4: Concepts inherent in numeracy to enable students to represent physical events, work with data, reason, communicate mathematically, and make connections within their respective content areas in order to solve problems

DISPOSITIONS

Teachers value and are committed to:

- Element 1.5: Appreciating multiple perspectives and conveying to learners how knowledge is developed from the vantage point of the knower
- Element 1.6: Enthusiasm for the discipline(s) they teach and in making connections to every day life

PERFORMANCES

Teachers engage in activities to:

- Element 1.7: Promote the development of critical and creative thinking, problem-solving and decision-making skills by engaging students in formulating and testing hypotheses according to the methods of inquiry and standards of evidence within the discipline
- Element 1.8: Make effective use of multiple representations and explanations of disciplinary concepts that capture key ideas and link them to students' prior understanding
- Element 1.9: Evaluate teaching resources and curriculum materials for their completeness, accuracy and usefulness for representing particular ideas and concepts

Standard 2: Human Growth and Development

Teachers shall understand how children and adolescents develop and learn in a variety of school, family, and community contexts and provide opportunities that support their intellectual, social, emotional, and physical development.

KNOWLEDGE

Teachers know and understand:

- Element 2.1: How students construct knowledge, acquire skills and develop habits of mind and how to use instructional strategies that promote student learning

- Element 2.2: How student learning is influenced by individual experiences, talents and prior learning, as well as language, culture, family, and community values
- Element 2.3: How to identify and teach to the developmental abilities of students, which may include learning differences, visual and perceptual differences, cultural and socio-emotional differences, special physical or emotional challenges and gifted and talented exceptionalities

DISPOSITIONS

Teachers value and are committed to:

- Element 2.4: The educability of all children and adolescents
- Element 2.5: The belief that all children and adolescents bring talents and strengths to learning
- Element 2.6: Appreciation for multiple ways of knowing
- Element 2.7: The diverse talents of all students and to helping them develop self-confidence and subject matter competence
- Element 2.8: The belief that all children and adolescents can learn at high levels and achieve success

PERFORMANCES

Teachers apply:

- Element 2.9: Learning theory to accommodate differences in student intelligence, perception, cognitive style and achievement levels

Standard 3: Diverse Learners

Teachers shall understand the practice of culturally responsive teaching.

KNOWLEDGE

Teachers know and understand:

- Element 3.1: How a person's world view is profoundly shaped by his or her life experiences, as mediated by factors such as social class, gender, race, ethnicity, language, sexual orientation, age and special needs
- Element 3.2: The supports for and barriers to culturally responsive teaching in school environments
- Element 3.3: The process of second language acquisition and strategies to support the learning of students whose first language is not English
- Element 3.4: The negative impact of bias, prejudice, and discrimination on students and society

DISPOSITIONS

Teachers value and are committed to:

- Element 3.5: Respect for individual and cultural differences, and appreciation of the basic worth of each individual and cultural group
- Element 3.6: The diversity of learning that takes place in the classroom, respect for the talents and perspectives of each student and sensitivity to community and cultural norms

PERFORMANCES

Teachers engage in activities to:

- Element 3.7: Create a learning community in which individual differences are respected
- Element 3.8: Learn about the diverse students they teach, and the students' families and communities

- Element 3.9: Use strategies to support the learning of students whose first language is not English
- Element 3.10: Use knowledge of students and their lives to design and carry out instruction that builds on students' strengths while meeting their needs and taking into account issues of social class, gender, race, ethnicity, language, sexual orientation, age and special needs.

Standard 4: Instructional Planning and Strategies

Teachers shall understand instructional planning, design long- and short-term plans based upon knowledge of subject matter, students, community, and curriculum goals, and shall employ a variety of developmentally appropriate strategies in order to promote critical thinking, problem solving and the performance skills of all learners.

KNOWLEDGE

Teachers know and understand:

- Element 4.1: How to plan instruction based on students' needs, developmental progress and prior knowledge
- Element 4.2: Available and appropriate resources and materials for instructional planning
- Element 4.3: Techniques for modifying instructional methods, materials and the environment to help all students learn
- Element 4.4: A variety of instructional approaches and the use of various technologies, to promote thinking and understanding

DISPOSITIONS

Teachers value and are committed to:

- Element 4.5: The development of students' critical thinking, independent problem-solving and performance capabilities

PERFORMANCES

Teachers engage in activities to:

- Element 4.6: Identify and design instruction appropriate to students' stage of development, learning styles, strengths and needs
- Element 4.7: Plan instruction based on knowledge of classroom, school and community culture
- Element 4.8: Evaluate teaching resources and curriculum materials for their comprehensiveness, accuracy and usefulness for representing particular ideas and concepts
- Element 4.9: Identify strategies to create learning experiences that make subject matter meaningful for students, address a variety of learning styles, encourage students to pursue their own interests and inquiries and help students connect their learning to personal goals
- Element 4.10: Plan and develop effective lessons by organizing instructional activities and materials, incorporating a wide range of community and technology resources, to promote achievement of lesson objectives
- Element 4.11: Use formal and informal methods of assessment, information about students, pedagogical knowledge, and research as sources for active reflection, evaluation and revision of practice
- Element 4.12: Create interdisciplinary learning experiences that allow students to integrate knowledge, skills and methods of inquiry from several subject areas.

Standard 5: Assessment

Teachers shall understand and use multiple assessment strategies and interpret results to evaluate and promote student learning and to modify instruction in order to foster the continuous development of students.

KNOWLEDGE

Teachers know and understand:

- Element 5.1: The characteristics, uses, advantages, and limitations of different types of assessments (for example, criterion-referenced and norm-referenced instruments, traditional standardized and performance-based tests, observation systems and assessments of student work) for evaluating how students learn, what they know and are able to do, and what kinds of experiences will support their further growth and development
- Element 5.2: Measurement theory and assessment-related issues, such as validity, reliability, bias and scoring concerns

DISPOSITIONS

Teachers value and are committed to:

- Element 5.3: The belief that students' strengths are the basis for growth and their errors are opportunities for learning

PERFORMANCES

Teachers engage in activities to:

- Element 5.4: Analyze student performance using multiple sources of data, and to modify future plans and instructional techniques that promote desired student learning outcomes
- Element 5.5: Provide students with constructive feedback on their learning and encourage their use of data and self-assessment strategies to monitor their progress toward personal goals
- Element 5.6: Accurately document and report assessment data and ongoing student data to parents and professional staff
- Element 5.7: Enhance their knowledge of learners and evaluate students' progress and performance using a variety of formal and informal assessment techniques to modify teaching and learning strategies

Standard 6: Learning Environment

Teachers shall understand individual and group motivation and behavior and shall create a supportive, safe and respectful learning environment that encourages positive social interaction, active engagement in learning and self-motivation.

KNOWLEDGE

Teachers know and understand:

- Element 6.1: The principles and strategies of effective classroom management that promote positive relationships, cooperation and purposeful learning activities in the classroom
- Element 6.2: How the classroom environment influences learning and promotes positive behavior for all students
- Element 6.3: How classroom participation supports student commitment

DISPOSITIONS

Teachers value and are committed to:

- Element 6.4: The role of students in promoting each other's learning and recognize the importance of peer relationships in creating a climate of learning
- Element 6.5: Taking responsibility for establishing a positive climate in the classroom and participation in maintaining such a climate in the school as a whole
- Element 6.6: The expression and use of democratic values in the classroom

PERFORMANCES

Teachers engage in activities to:

- Element 6.7: Maintain a learning community in which students assume responsibility for themselves and one another, participate in decision-making and work collaboratively and independently
- Element 6.8: Create a safe and secure classroom climate for all students, by practicing effective listening and group facilitation skills
- Element 6.9: Create a positive classroom climate which is socially, emotionally and physically safe
- Element 6.10: Establish and maintain appropriate standards of behavior
- Element 6.11: Use instructional time effectively
- Element 6.12: Prepare students for and monitor independent and group work that allows for full and varied participation of all individuals

Standard 7: Special Needs

Teachers shall adapt and modify instruction to accommodate the special learning needs of all students.

KNOWLEDGE

Teachers know and understand:

- Element 7.1: How to access information regarding applicable laws, rules, regulations and procedural safeguards regarding planning and implementing the individual education program
- Element 7.2: Available resources related to educational strategies to accommodate individual differences and to employ positive behavioral intervention techniques to students with special needs

DISPOSITIONS

Teachers value and are committed to:

- Element 7.3: The belief that children and adolescents with special needs can learn at high levels and achieve success

PERFORMANCES

Teachers engage in activities to:

- Element 7.4: Apply knowledge of students' abilities/disabilities, experiences, talents and prior learning, as well as language, culture, economics, family and community values to positively impact student learning
- Element 7.5: Employ appropriate diagnostic measures and interpret the results to implement strategies that influence learning
- Element 7.6: Participate in the design and implementation of the Individualized Education Program (IEP), where appropriate
- Element 7.7: Meet the needs of all learners by using a wide range of teaching techniques to accommodate and modify strategies, services and resources, including technology

- Element 7.8: Make appropriate provisions, in terms of time and circumstances, for work, task assigned, communication and response modes, for individual students who have particular learning differences or needs

Standard 8: Communication

Teachers shall use knowledge of effective verbal, nonverbal and written communication techniques and the tools of information literacy to foster the use of inquiry, collaboration and supportive interactions.

KNOWLEDGE

Teachers know and understand:

- Element 8.1: The power of communication in the teaching and learning process.

DISPOSITIONS

Teachers value and are committed to:

- Element 8.2: Appreciating the cultural dimension of communication, responding appropriately and seeking to foster culturally sensitive communication by and among all students in the class
- Element 8.3: Being a thoughtful and responsive listener

PERFORMANCES

Teachers engage in activities to:

- Element 8.4: Communicate clearly in English, using precise language and appropriate oral and written expressions
- Element 8.5: Assist students individually or as a member of a group to access, evaluate, synthesize and use information effectively to accomplish a specific purpose
- Element 8.6: Use effective verbal and nonverbal techniques which foster individual and collective inquiry
- Element 8.7: Model effective communication strategies and questioning techniques in conveying ideas and stimulating critical thinking
- Element 8.8: Communicate in a variety of ways that demonstrate a sensitivity to cultural, linguistic, gender and social differences

Standard 9: Collaboration and Partnerships

Teachers shall build relationships with parents, guardians, families, and agencies in the larger community to support students' learning and well-being.

KNOWLEDGE

Teachers know and understand:

- Element 9.1: The importance of meaningful parent/family involvement in education in addressing the unique student needs and the perspectives to be gained from effective school/home interactions that contribute to high-quality teaching and learning
- Element 9.2: The role of the school within the community and how to utilize diverse partnerships to contribute to student learning and development
- Element 9.3: How to collaborate with all stakeholders regarding decision-making and the well-being of students while respecting student/family privacy and confidentiality

DISPOSITIONS

Teachers value and are committed to:

- Element 9.4: Recognizing the role of parents, guardians and other family members as a child's primary teacher
- Element 9.5: Being concerned about all aspects of the student's well-being and working with parents/families to provide diverse opportunities for student success
- Element 9.6: Being willing to work with parents/families and other professionals to improve the overall learning environment for students

PERFORMANCES

Teachers engage in activities to:

- Element 9.7: Identify and utilize family and community resources to foster student learning and provide opportunities for parents to share skills and talents that enrich learning experiences
- Element 9.8: Establish respectful and productive relationships and to develop cooperative partnerships with diverse families, educators and others in the community in support of student learning and wellbeing
- Element 9.9: Institute parent/family involvement practices that support meaningful communication, parenting skills, enriched student learning, volunteer and decision-making opportunities at school and collaboration to strengthen the teaching and learning environment of the school

Standard 10: Professional Development

Teachers shall participate as active, responsible members of the professional community, engaging in a wide range of reflective practices, pursuing opportunities to grow professionally and establishing collegial relationships to enhance the teaching and learning process.

KNOWLEDGE

Teachers know and understand:

- Element 10.1: How education research and other methods of inquiry can be used as a means for continuous learning, self assessment and development

DISPOSITIONS

Teachers value and are committed to:

- Element 10.2: Refining practices that address the needs of all students and the school community
- Element 10.3: Professional reflection, assessment and learning as an ongoing process
- Element 10.4: Collaboration with colleagues to give and receive help

PERFORMANCES

Teachers engage in activities to:

- Element 10.5: Use reflective practice and the Professional Development Standards to set goals for their professional development plans
- Element 10.6: Learn through professional education organizations
- Element 10.7: Make the entire school a productive learning climate through participation in collegial activities

Research Base and Validation Studies on the Marzano Causal Teacher Evaluation Model, April 2011

The Marzano Causal Teacher Evaluation Model² (Marzano Teacher 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 model 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, eight elements in Domain 2, five elements in Domain 3 and six 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 eight elements (3 + 2 + 3); **Domain 3** contains five elements (3 + 2); and **Domain 4** contains six 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 New Jersey Professional Standards for Teachers and School Leaders guidelines and the requirements of Race to the Top initiative.

The Research Base from which the Model was Developed

Each of the works cited above from which the Marzano Teacher Evaluation Model was developed report substantial research on the elements they address. For example, *The Art and Science of Teaching* includes more than 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, more than 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, more than 2,000,000 copies of the books cited above have been purchased and disseminated to K-12 educators across the United States.

² © 2011 Robert J. Marzano. The Marzano Causal Teacher Evaluation Model can only be digitized in iObservation. iObservation is a registered trademark of Learning Sciences International® www.MarzanoEvaluation.com

Experimental/Control Studies

Perhaps one of the more unique aspects of the research on the Marzano Teacher Evaluation Model is that a growing number of experimental/control studies 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, more than 300 experimental/control studies have been conducted. Those studies involved more than 14,000 students and 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 used the classroom strategies and behaviors in the Marzano Teacher Evaluation Model, their typical student achievement increased by 16 percentile points. However, greater gains (i.e., those associated with an effect size of 2.00) can be realized if specific strategies are used 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 Teacher Evaluation Model. For example, a study was recently conducted in Oklahoma as a part of an examination of elements 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 61 schools, 117 teachers and more than 13,000 K-12 students. Collectively, those reports indicate positive relationships with various elements of the Marzano Teacher 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 Marzano Teacher Evaluation Model is that its effects have been examined in the context of technology. For example, a two-year study was conducted in part to determine 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*, 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 Teacher Evaluation Model was designed using literally thousands of studies conducted over the past five 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 and indicate positive correlations between the elements of the model and student mathematics and reading achievement. Finally, the Marzano Teacher Evaluation Model has been studied as to its effects on the use of technology (e.g., interactive whiteboards) and found to be highly correlated with the effectiveness of that technology.

References

- Haystead, M. W. & Marzano, R.J. (2010). *Final Report: A Second Year Evaluation Study of Promethean ActivClassroom*. Englewood, CO: Marzano Research Laboratory (marzanoresearch.com).
- Haystead, M. W. & Marzano, R.J. (2010). *Meta-Analytic Synthesis of Studies Conducted at Marzano Research Laboratory on instructional Strategies*. Englewood, CO.
- Marzano Research Laboratory (marzanoresearch.com) Marzano, R.J. (2003). *What Works in Schools*. Alexandria, VA: ASCD .
- Marzano, R. J. (2006). *Classroom Assessment and Grading that Work*. Alexandria, VA: ASCD.
- Marzano, R.J. (2007). *The Art and Science of Teaching*. Alexandria, VA: ASCD.
- Marzano, R. J., Frontier, T., & Livingston, D. (2011). *Effective Supervision: Supporting the Art and Science of Teaching*. Alexandria VA: ASCD.
- Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom Instruction that Works*. Alexandria, VA: ASCD.
- Marzano, R.J., Marzano, J. S., & Pickering, D. J. (2003). *Classroom Management that Works*. Alexandria, VA: ASCD.
- Marzano Research Laboratory. (2010). *What Works in Oklahoma Schools: Phase I Report*. Englewood, CO: Marzano Research Laboratory (marzanoresearch.com).
- Marzano Research Laboratory. (2011). *What Works in Oklahoma Schools: Phase II Report*. Englewood, CO: Marzano Research Laboratory (marzanoresearch.com).