



Dr. Robert Marzano's
Evaluation Model Alignment to
Oklahoma's Teaching Standards

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

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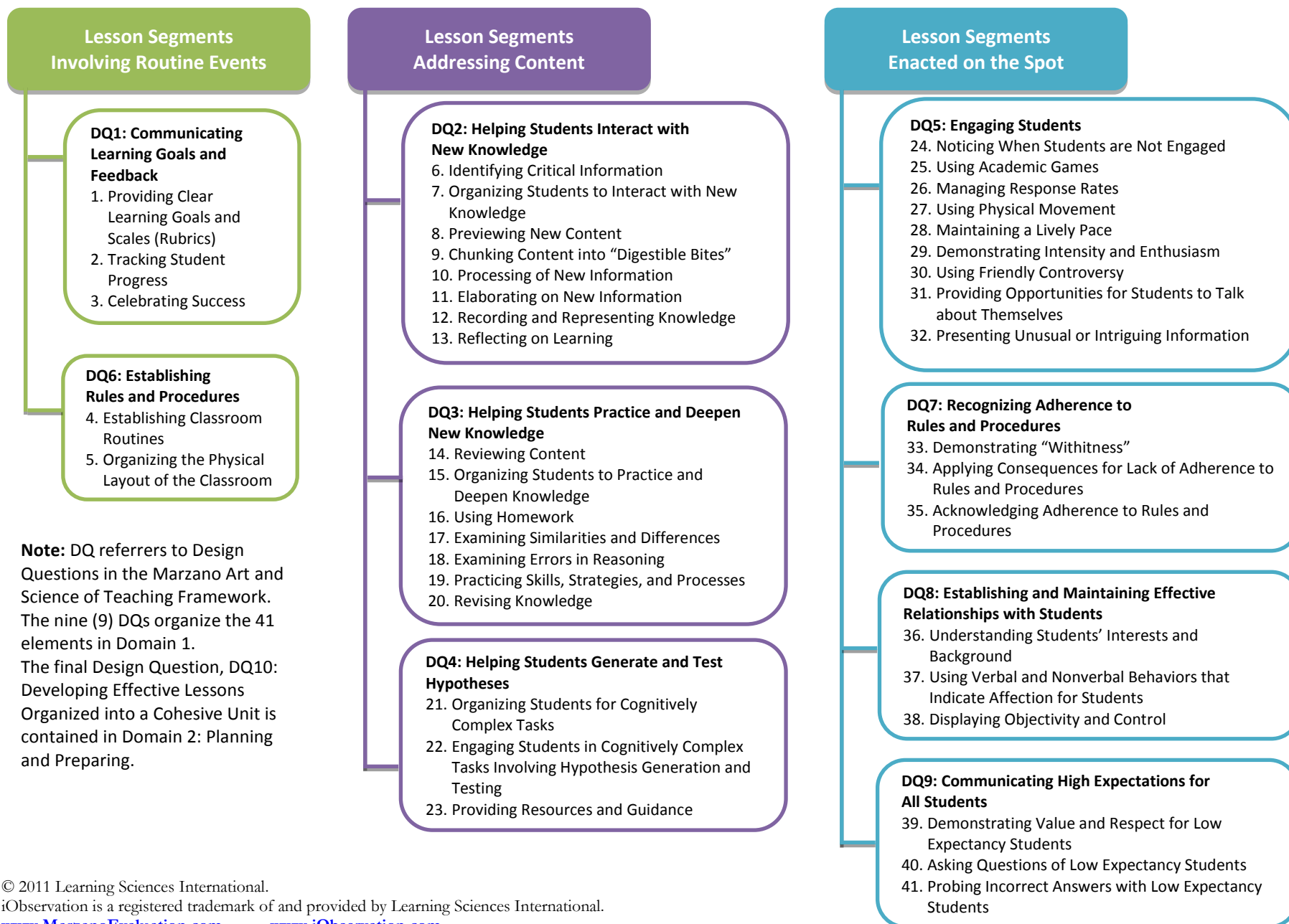
Preface

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.

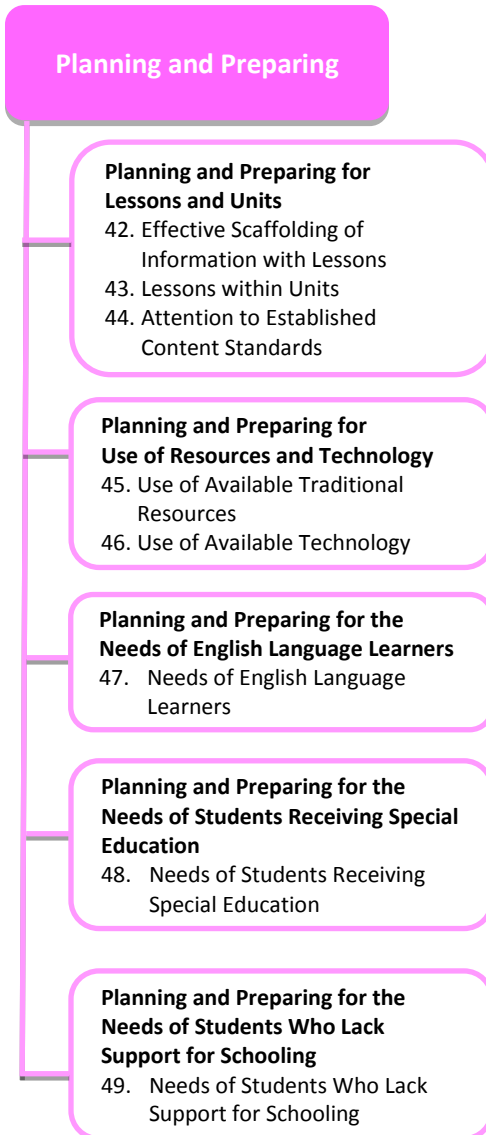
The goal of an effective evaluation system is for teachers to incrementally increase their expertise in teaching year to year and, therefore, incrementally increase their ability to raise student learning gains year to year. Dr. Marzano's Causal Teacher Evaluation Model (*herein referred to as the Marzano 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.

Oklahoma's Criteria for Effective Teaching 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.

Domain 1: Classroom Strategies and Behaviors



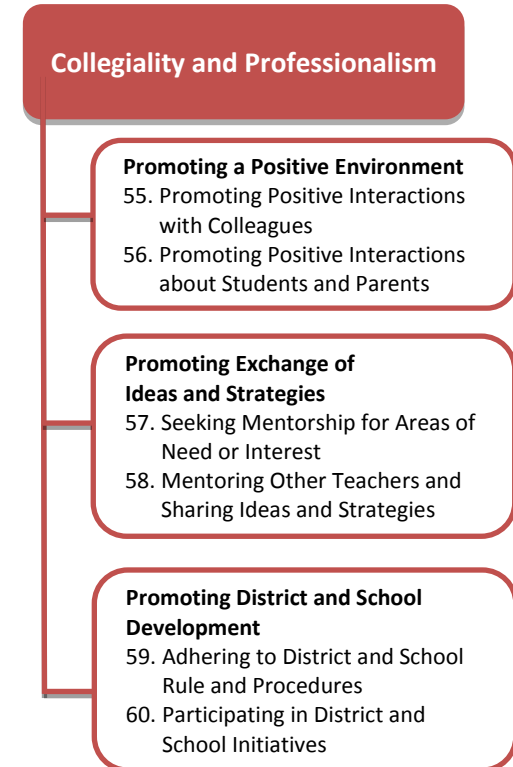
Domain 2: Planning and Preparing



Domain 3: Reflecting on Teaching



Domain 4: Collegiality and Professionalism



Dr. Marzano’s Evaluation Model Comparison to the Oklahoma Teaching Standards

Marzano Evaluation Model Domains 1, 2, 3, and 4	Oklahoma’s Teaching Standards
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)	I. B. 1 , I. B. 2 , I. B. 5 , I. B. 6 , I. B. 7 , I. B. 11 , II. A. 2
2. Tracking Student Progress	I. B. 5 , I. B. 6 , I. B. 8 , I. B. 9 , I. B. 10 , I. B. 11 , II. A. 1 , II. A. 2 , II. A. 3 , II. B. 1
3. Celebrating Success	I. B. 8 , I. B. 9 , II. A. 2 , II. A. 3 , II. B. 1
Design Question #6: What will I do to establish and maintain classroom rules and procedures?	
4. Establishing Classroom Routines	I. A. 2 , I. A. 3
5. Organizing the Physical Layout of the Classroom	I. A. 3 , I. A. 4
II. Lesson Segments Addressing Content	
Design Question #2: What will I do to help students effectively interact with new knowledge?	
6. Identifying Critical Information	I. B. 2 , I. B. 3
7. Organizing Students to Interact with New Knowledge	I. B. 6 , I. B. 12
8. Previewing New Content	I. B. 2 , I. B. 12
9. Chunking Content into “Digestible Bites”	I. B. 5 , I. B. 7
10. Processing of New Information	I. B. 5
11. Elaborating on New Information	I. B. 8
12. Recording and Representing Knowledge	I. B. 5 , I. B. 7
13. Reflecting on Learning	I. B. 8 , I. B. 9 , I. B. 12
Design Question #3: What will I do to help student practice and deepen their understanding of new knowledge?	
14. Reviewing Content	I. B. 2 , I. B. 12
15. Organizing Students to Practice and Deepen Knowledge	I. B. 6 , I. B. 10
16. Using Homework	I. B. 10 , I. B. 12
17. Examining Similarities and Differences	I. B. 9
18. Examining Errors in Reasoning	I. B. 9
19. Practicing Skills, Strategies, and Processes	I. B. 11
20. Revising Knowledge	I. B. 9
Design Question #4: What will I do to help students generate and test hypotheses about new knowledge?	
21. Organizing Students for Cognitively Complex Tasks	I. B. 6 , I. B. 9

22. Engaging Students in Cognitively Complex Tasks Involving Hypothesis Generation and Testing	I. B. 9
23. Providing Resources and Guidance	I. B. 8, I. B. 9, I. B. 11
III. Lesson Segments Enacted on the Spot	
Design Question #5: What will I do to engage students?	
24. Noticing When Students are Not Engaged	I. B. 5
25. Using Academic Games	I. B. 5
26. Managing Response Rates	I. B. 4, I. B. 5, I. B. 8
27. Using Physical Movement	I. B. 5
28. Maintaining a Lively Pace	I. A. 2, I. B. 5, I. B. 9
29. Demonstrating Intensity and Enthusiasm	I. A. 4, I. B. 5
30. Using Friendly Controversy	I. B. 5
31. Providing Opportunities for Students to Talk about Themselves	I. B. 3, I. B. 5
32. Presenting Unusual or Intriguing Information	I. B. 3, I. B. 5
Design Question #7: What will I do to recognize and acknowledge adherence or lack of adherence to rules and procedures?	
33. Demonstrating “Withitness”	I. A. 3, I. B. 10
34. Applying Consequences for Lack of Adherence to Rules and Procedures	I. A. 3
35. Acknowledging Adherence to Rules and Procedures	I. A. 3
Design Question #8: What will I do to establish and maintain effective relationships with students?	
36. Understanding Students’ Interests and Background	I. B. 3
37. Using Verbal and Nonverbal Behaviors that Indicate Affection for Students	I. B. 4
38. Displaying Objectivity and Control	I. A. 4
Design Question #9: What will I do to communicate high expectations for all students?	
39. Demonstrating Value and Respect for Low Expectancy Students	I. B. 4, II. A. 3, II. B. 1
40. Asking Questions of Low Expectancy Students	I. B. 4, I. B. 10, II. A. 3, II. B. 1
41. Probing Incorrect Answers with Low Expectancy Students	I. B. 4, I. B. 10, II. A. 3, II. B. 1
DOMAIN 2: PLANNING AND PREPARING	
I. Planning and Preparing for Lessons and Units	
42. Effective Scaffolding of Information with Lessons	I. A. 1, I. B. 5, II. A. 1
43. Lessons within Units	I. A. 1, I. B. 5,

	II. A. 1
44. Attention to Established Content Standards	I. A. 1, I. B. 1, II. A. 1
II. Planning and Preparing for Use of Resources and Technology	
45. Use of Available Traditional Resources	I. A. 1
46. Use of Available Technology	I. A. 1
III. Planning and Preparing for Needs of English Language Learners	
47. Needs of English Language Learners	I. A. 1, I. B. 1, I. B. 9, II. A. 3, II. B. 1
IV. Planning and Preparing for Needs of Students Receiving Special Education	
48. Needs of Students Receiving Special Education	I. A. 1, I. B. 1, I. B. 9, II. A. 3, II. B. 1
V. Planning and Preparing for Needs of Students Who Lack Support for Schooling	
49. Needs of Students Who Lack Support for Schooling	I. A. 1, I. B. 1, I. B. 9, II. A. 3, II. B. 1
DOMAIN 3: REFLECTING ON TEACHING	
I. Evaluating Personal Performance	
50. Identifying Areas of Pedagogical Strength and Weakness	I. A. 1
51. Evaluating the Effectiveness of Individual Lessons and Units	I. A. 1
52. Evaluating the Effectiveness of Specific Pedagogical Strategies and Behaviors	I. A. 1
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 and Development Plan	Not evident
DOMAIN 4: COLLEGIALITY AND PROFESSIONALISM	
I. Promoting a Positive Environment	
55. Promoting Positive Interactions with Colleagues	Not evident
56. Promoting Positive Interactions about Students and Parents	Not evident
II. Promoting Exchange of Ideas and Strategies	
57. Seeking Mentorship for Areas of Need or Interest	Not evident
58. Mentoring Other Teachers and Sharing Ideas and Strategies	Not evident
III. Promoting District and School Development	
59. Adhering to District and School Rule and Procedures	Not evident
60. Participating in District and School Initiatives	Not evident

It is useful to note that some elements in the proposed model are not represented in the Oklahoma criteria. Specifically, none of the elements from the following domains in the proposed model are reflected in the Oklahoma criteria:

- Domain 3-II: Developing and Implementing a Professional Growth Plan
- Domain 4-I: Promoting a Positive Environment
- Domain 4-II: Promoting Exchange of Ideas and Strategies
- Domain 4-III: Promoting District and School Development

Oklahoma Criteria for Effective Teaching

I. Practice

Observable behaviors exhibited by the teacher.

A. Teacher Management Indicators

- **A.1 – Preparation:** The teacher plans for delivery of the lesson relative to short-term and long-term objectives.
- **A. 2 – Routine:** The teacher uses minimum class time for non-instructional routines thus maximizing time on task.
- **I. A. 3 – Discipline:** The teacher clearly defines expected behavior (encourages positive behavior and controls negative behavior).
- **A. 4 – Learning Environment:** The teacher establishes rapport with students and provides a pleasant, safe and orderly climate conducive to learning.

B. Teacher Instructional Indicators

- **B. 1 – Establishes Objectives:** The teacher communicates the instructional objectives to students.
- **B. 2 – Stresses Sequence:** The teacher shows how the present topic is related to those topics that have been taught or that will be taught.
- **B. 3 – Relates Objectives:** The teacher relates subject topics to existing student experiences.
- **B. 4 – Involves All Learners:** The teacher uses signaled responses, questioning techniques, and/or guided practices to involve all students.
- **B. 5 – Explains Content:** The teacher teaches the objectives through a variety of methods.
- **B. 6 – Explains Directions:** The teacher gives directions that are clearly stated and related to the learning objectives.
- **B. 7 – Models:** The teacher demonstrates the desired skills.
- **B. 8 – Monitors:** The teacher checks to determine if students are progressing toward stated objectives.
- **B. 9 – Adjusts Based on Monitoring:** The teacher changes instruction based on the results of monitoring.
- **B. 10 – Guides Practice:** The teacher requires all students to practice newly learned skills while under the direct supervision of the teacher.
- **B. 11 – Provides for Independent Practice:** The teacher requires students to practice newly learned skills without the direct supervision of the teacher.
- **B. 12 – Establishes Closure:** The teacher summarizes and fits into context what has been taught.

II. Products

Tangible results of the teaching process.

A. Teacher Product Indicators

- **II. A. 1 – Lesson Plan:** The teacher writes daily lesson plans designed to achieve the identified objectives.
- **II. A. 2 – Student Files:** The teacher maintains a written record of student progress.
- **II. A. 3 – Grading Patterns:** The teacher utilizes grading patterns that are fairly administered and based on identified criteria.

B. Student Achievement Indicators

- **II. B. 1 – Student Achievement Indicators:** --Students demonstrate mastery of the stated objectives through projects, daily assignments, performance and test scores.

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

Research Base and Validation Studies on the Marzano Evaluation Model¹

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 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 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.

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