Marzano Levels of School Effectiveness

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Marzano Levels of School Effectiveness

The five levels of school effectiveness outlined below are based on Robert J. Marzano's publications, research, and practical experiences working with teachers, schools, and districts in every state in the nation over a thirty-year period of time. Movement of a school through these levels is intended to produce a system that has "high reliability" regarding each level for which the school has successfully demonstrated it satisfies the criterion indicators (i.e., lagging indicators). In effect, when a school has met the criterion indicators for a specific level in the model, it consistently monitors those indicators and makes immediate corrections when school performance falls below acceptable levels.

The leading indicators for each level can be considered more qualitative evidence that a school is at or approaching a specific level. The criterion indicators (lagging indicators) for a given level can be considered the minimally acceptable levels of performance that must be satisfied for a school to be deemed as reliable for that specific level.

As a school moves through the levels, it becomes reliable relative to more variables and becomes more transformational in its approach to educating its students. At the highest level (i.e., level 5) a school has made a dramatic shift in the way it "does business" and can guarantee that every student has mastered specific content necessary for success in the 21st century.

Some general guidelines to follow when using this model that are not directly addressed in this outline include:

- Schools can and should work on the leading indicators for multiple levels simultaneously, especially for levels 1, 2, and 3.
- The teacher evaluation system used in a school should directly support attainment of the levels in the model. (See the Marzano Teacher Evaluation System for examples.)
- The school leader evaluation system used in a school should directly support attainment of the levels in the model. (See the Marzano School Leader Evaluation System for examples.)

Level 1: A Safe and Orderly Environment That Supports Cooperation and Collaboration

Leading Indicators:

(1) The faculty and staff perceive the school environment as safe and orderly.

Examples:

- When asked, faculty and staff describe the school as a safe place
- When asked, faculty and staff describe the school as an orderly place
- Clear and specific rules and procedures are in place for the running of the school
- Faculty and staff know the emergency management procedures and how to implement them for specific incidents
- Evidence of practicing emergency management procedures for specific incidents is available
- Evidence of updates to emergency management plans is available

(2) Students, parents, and the community perceive the school environment as safe and orderly.

Examples:

- When asked, parents and students describe the school as a safe place
- When asked, parents and students describe the school as an orderly place
- Clear and specific rules and procedures are in place for the running of the school
- The school employs social media so that students may anonymously report potential incidents
- The school has a means of communicating to parents about issues regarding school safety (e.g., call-out system)
- The school coordinates with local law enforcement agencies regarding school safety issues
- The school engages parents and community regarding issues of school safety

(3) Teachers have formal roles in the decision-making process regarding school initiatives.

Examples:

- The specific types of decisions on which teachers will have direct input are made clear
- Data-gathering techniques are in place to collect information from teachers
- Notes and reports are in place that describe how teacher input was used when making specific decisions
- Electronic tools are utilized to collect and report teacher opinions regarding specific decisions (e.g., Survey Monkey)
- Groups of teachers are targeted and utilized to provide input regarding specific decisions

(4) Teacher teams and collaborative groups regularly interact to address common issues regarding curriculum, assessment, instruction, and the achievement of all students.

Examples:

- Professional learning communities (PLCs) are in place
- PLCs have written goals
- The school regularly examines the PLCs' progress toward goals
- Common assessments are created by PLCs
- Student achievement and growth are analyzed by PLCs
- Data teams are in place
- Data teams have written goals
- The school regularly examines each data team's progress toward goals
- The school collects and reviews minutes, notes, and goals from meetings to maintain a focus on student achievement

(5) Teachers and staff have formal ways to provide input regarding the optimal functioning of the school.

Examples:

- Data collection systems are in place to collect opinion data from teachers and staff regarding the optimal functioning of the school
- Data is archived and reports regularly generated regarding these data
- The manner in which these data are used is made transparent
- The school improvement team provides input regarding the school improvement plan

(6) Students, parents, and community have formal ways to provide input regarding the optimal functioning of the school.

Examples:

- Data collection systems are in place to collect opinion data from students, parents, and community regarding the optimal functioning of the school
- Data is archived and reports regularly generated regarding these data
- The manner in which these data are used is made transparent
- The school provides an interactive website for students, parents, and the community
- The school engages in social networking technologies (Twitter, Facebook) to involve students, parents, and community
- The school engages in virtual town hall meetings
- The school conducts focus group meetings with students
- The school hosts or speaks at community/business luncheons

(7) The success of the whole school, as well as individuals within the school, is appropriately acknowledged

Examples:

- When asked, faculty and staff report that the accomplishments of the school have been adequately acknowledged and celebrated
- When asked, faculty and staff report that their individual accomplishments have been adequately acknowledged and celebrated
- The school recognizes the accomplishments of individual teachers, teams of teachers, and the whole school in a variety of ways (e.g., faculty celebrations, newsletters to parents, announcements, websites, social media)
- The school recognizes the success of individual departments
- The school regularly celebrates the success of a variety of types of individuals (e.g., teacher of the year, support staff employee of the year)

(8) The fiscal, operational, and technological resources of the school are managed in a way that directly supports teachers.

Examples:

- When asked, faculty and staff report that they have adequate materials to teach effectively
- When asked, faculty and staff report that they have adequate time to teach effectively
- The school develops, submits, and implements detailed budgets
- The school successfully accesses and leverages a variety of resources (e.g., grants, title funds)
- The school manages time effectively in order to maximize focus on instruction
- The school appropriately directs the use of technology to improve teaching and learning
- The school provides adequate training for the instructional technology teachers are expected to use

Examples of Criterion (Lagging) Indicators:

- **Few, if any, incidents occur in which students' safety is compromised**
- **Few, if any, incidents occur in which rules and procedures are not followed**
- **Surveys of faculty and staff indicate high agreement that the school is safe and orderly**
- **Surveys of students, parents, and community indicate high agreement that the school is safe and orderly**
- **Surveys of faculty and staff indicate high agreement that they have input into the well functioning of the school**
- **Surveys of students, parents, and community indicate high agreement that they have input into the well functioning of the school**
- **Evidence is available regarding specific decisions that were made with input from faculty and staff**
- **Evidence is available regarding specific decisions that were made with input from students, parents, and the community**
- **Evidence is available for specific projects that were developed through collaborative efforts of teacher teams**
- **Materials and resources for specific classes and courses meet the state or district specifications for those classes and courses**
- **Time available for specific classes and courses meets the state or district specifications for those classes and courses**
- **Evidence is available that adequate proportions of the school budget are focused on issues that directly support teaching and learning**
- **Evidence is available that specific accomplishments of the school and/or individuals within the school have been formally acknowledged**
- **Incidents indicating teacher dissatisfaction with the school (e.g., teacher requests for transfers to other schools) are very low or nonexistent**

Level 2: An Instructional Framework That Develops and Maintains Effective Instruction in Every Classroom

Leading Indicators:

(1) The school communicates a clear vision as to how instruction should be addressed in the school.

Examples:

- A written document articulating the school-wide model of instruction is developed with input by teacher leaders
- Professional development opportunities are provided for new teachers regarding the school-wide model of instruction
- When asked, teachers can describe the major components of the school-wide model of instruction
- New initiatives are prioritized and limited in number to support the instructional model
- The school-wide language of instruction is used regularly in faculty and department meetings
- The school-wide language of instruction is used regularly by faculty in their informal conversations
- The school-wide language of instruction is used regularly by faculty in their professional learning communities

(2) Support is provided to teachers to continually enhance their pedagogical skills through reflection and professional growth plans.

Examples:

- Individual teachers have written statements of their pedagogical growth goals
- Individual teachers keep track of their progress on their pedagogical growth goals
- The school leader meets with teachers regarding their growth goals
- When asked, teachers can describe their progress on their pedagogical growth goals
- The school hires effective teachers
- The school has a system in place to effectively evaluate the selection process for hiring new teachers
- The school has a system in place to effectively evaluate and revise the new teacher induction program
- The school retains effective teachers
- When asked, the school can produce evaluation results, growth plans, and supports for struggling teachers

(3) Predominant instructional practices throughout the school are known and monitored.

Examples:

- Walk-through data are aggregated in such a way as to disclose predominant instructional practices in the school
- When asked, the school leader can describe the predominant instructional practices in the school
- When asked, teachers can describe the predominant instructional practices in the school
- The school provides forthright feedback to teachers regarding their instructional practices
- The school leader can describe effective practices and problems of practice

(4) Teachers are provided with clear, ongoing evaluations of their pedagogical strengths and weaknesses that are based on multiple sources of data and are consistent with student achievement data.

Examples:

- Highly specific rubrics are in place to provide teachers accurate feedback on their pedagogical strengths and weaknesses
- Teacher feedback and evaluation data is based on multiple sources of information including, but not limited to: direct observation, teacher self-report, analysis of teacher performance as captured on video, student reports on teacher effectiveness, and peer feedback to teachers
- Teacher evaluation data are regularly used as the subject of conversation between school leaders and teachers
- The school provides frequent observations and feedback to teachers
- When asked, teachers can describe their instructional strategies that have the strongest and weakest relationships to student achievement

(5) Teachers are provided with job-embedded professional development that is directly related to their instructional growth goals.

Examples:

- Online professional development courses and resources are available to teachers regarding their instructional growth goals
- Teacher-led professional development is available to teachers regarding their instructional growth goals
- Instructional coaching is available to teachers regarding their instructional growth goals
- Data is collected linking the effectiveness of professional development to the improvement of teacher practices
- When asked, teachers can describe how the professional development supports their attainment of instructional growth goals

(6) Teachers have opportunities to observe and discuss effective teaching.

Examples:

- Teachers have opportunities to engage in instructional rounds
- Teachers have opportunities to view and discuss video-based examples of exemplary teaching
- Teachers have regular times to meet and discuss effective instructional practices (e.g., lesson study)
- Teachers have opportunities to interact about effective teaching via technology
- Instructional practices are regularly discussed at faculty and department meetings
- Video segments of instructional practices are regularly viewed and discussed at faculty and department meetings
- Information is available regarding participation of teachers in opportunities to observe and discuss effective teaching
- Information is available regarding teacher participation in virtual discussions regarding effective teaching

Examples of Criterion (Lagging) Indicators:

- **A document describing the school's instructional model is available**
- **Survey data indicate that teachers are well aware of the school's instructional model and their status within that model**
- **Evidence exists that the school has a demonstrated record of hiring and retaining effective teachers**
- **Evidence is available that teacher growth in pedagogical skill is consistent and meets or exceeds acceptable levels**
- **Evidence is available that teacher growth in pedagogical skill is related to the professional development opportunities provided by the school**
- **Evidence is available that the average level of teacher pedagogical skill meets or exceeds acceptable levels**
- **Evidence is available that any teacher who is below acceptable levels of pedagogical skill and/or growth is adhering to a detailed growth plan**
- **The distribution of teachers' pedagogical status is consistent with measures of student growth within the school**
- **Survey data indicate high levels of agreement that the school in general and the evaluation system in particular are designed to help teachers improve their pedagogical skills**
- **Evidence exists that teachers who have demonstrated little or no desire to develop or maintain high levels of pedagogical skill are counseled out of the profession or terminated in extreme cases**

Level 3: A Guaranteed and Viable Curriculum Focused on Enhancing Student Learning

Leading Indicators:

(1) The school curriculum and accompanying assessments adhere to state and district standards.

Examples:

- The written curriculum is analyzed to ensure that it correlates with state and district standards (e.g., Common Core if applicable)
- The written curriculum adequately addresses important 21st century skills (e.g., College and Career Readiness Skills and Mathematical Practice Skills from the CCSS)
- The curriculum taught in the classrooms (i.e., the taught curriculum) is analyzed to ensure that it correlates with the written curriculum
- Assessments have been analyzed to ensure that they accurately measure the written and taught curriculums
- School teams regularly analyze the relationship between the written curriculum, taught curriculum, and assessments
- When asked, teachers can describe the essential content and standards for their subject area(s) or grade level(s)

(2) The school curriculum is focused enough that it can be adequately addressed in the time available to teachers.

Examples:

- Essential elements of content are identified
- How much time it would take to adequately address the essential elements is examined
- Teams regularly meet to discuss the progression and viability of documents that articulate essential content and timing of delivery (e.g., pacing guides, curriculum maps)
- Essential vocabulary is identified at all levels (i.e., tiers 1, 2, and 3)

(3) All students have the opportunity to learn the critical content of the curriculum.

Examples:

- Tracking systems are in place that examine each student's access to the essential elements of the curriculum
- Parents are aware of their child's current access to the essential elements of the curriculum
- All students have access to advanced placement courses
- The extent to which all students have access to necessary courses has been analyzed
- The school ensures teachers have completed appropriate content area training in their subject area courses
- A system of direct vocabulary instruction is available all levels (i.e., tiers 1, 2, and 3)

(4) Clear and measurable goals are established and focused on critical needs regarding improving overall student achievement at the school level.

Examples:

- Goals are established as a percentage of students who will score at a proficient or higher level on state assessments or benchmark assessments
- Goals are established for eliminating differences in achievement for students at different socioeconomic levels
- Goals are established for eliminating differences in achievement for students of differing ethnicities
- School-wide achievement goals are posted so that faculty and staff see them on a regular basis
- School-wide achievement goals are discussed regularly at faculty and staff gatherings
- Faculty and staff can describe the school-wide achievement goals
- Faculty and staff can explain how goals eliminate differences in achievement for students of differing ethnicities
- Faculty and staff can explain how goals eliminate differences in achievement for students at different socioeconomic levels, English language learners, and students with disabilities
- Improvement goals are assigned to various departments and faculty
- Goals are established for eliminating the achievement gap for all students
- Goals are established for eliminating the differences in achievement for English language learners
- Goals are established for eliminating the differences in achievement for students with disabilities
- Goals address the most critical and severe deficiencies
- Timelines contain specific benchmarks for each goal, including individual(s) responsible for the goal

(5) Data are analyzed, interpreted, and used to regularly monitor progress toward school achievement goals.

Examples:

- Overall student achievement is regularly analyzed
- Student achievement is examined from the perspective of value-added results
- Results from multiple types of assessments are regularly reported and used (e.g., benchmark, common assessments)
- When asked, faculty and staff can describe the different types of reports available to them
- Reports, graphs, and charts are regularly updated to track growth in student achievement
- School leadership teams regularly analyze school growth data
- Data briefings are conducted at faculty meetings

(6) Appropriate school-level and classroom-level programs and practices are in place to help students meet individual achievement goals when data indicate interventions are needed.

Examples:

- Extended school day and week programs are in place
- Extended school year programs are in place
- After-school programs are in place
- Tutorial programs are in place
- The school schedule is designed so that students can receive academic help while in school
- Individual student completion of programs designed to enhance their academic achievement is monitored (i.e., gifted and talented, advanced placement, STEM, etc.)
- Response to intervention measures and programs are in place
- Enrichment programs are in place

Examples of Criterion (Lagging) Indicators:

- **Curriculum documents are in place that correlate the written curriculum to state and district standards (e.g., Common Core if applicable)**
- **Curriculum documents are in place correlating the written curriculum to the skills important to 21st century learning (e.g., College and Career Readiness Skills and Mathematical Practice Skills from the CCSS)**
- **Information is available correlating what is taught in the classrooms (i.e., the taught curriculum) and the written curriculum**
- **Information is available examining the extent to which assessments accurately measure the written and taught curriculums**
- **A written list of essential elements is in place**
- **A written list of essential vocabulary is in place for all levels (i.e., tiers 1, 2, and 3)**
- **A curriculum audit document is in place delineating how much time it would take to adequately address the essential elements**
- **All students have a prescribed program of study that documents access to courses**
- **Written goals are available specifying the percentage of students who will score at a proficient or higher level on state assessments or benchmark assessments**
- **Written goals are available specifying the elimination of differences in achievement for students at different socioeconomic levels**
- **Written goals are available specifying the elimination of differences in achievement for students of differing ethnicities**
- **Written goals are available specifying the elimination of the achievement gap for all students**
- **Written goals are available specifying the elimination of differences in achievement for English language learners**
- **Written goals are available specifying the elimination of differences in achievement for students with disabilities**
- **Written timelines are available containing specific benchmarks for each goal, including individual(s) responsible for the goal**
- **Reports, graphs, and charts are available for overall student achievement**
- **Evidence is available showing that reports, graphs, and charts are regularly updated to track growth in student achievement**
- **Evidence is available that students who need instructional support outside of the regular classroom have had access to and taken advantage of such support**

Level 4: A Standards-Referenced System of Reporting Student Progress

Leading Indicators:

(1) Clear and measurable goals are established and focused on critical needs regarding improving achievement of individual students within the school.

Examples:

- Goals are established for each student in terms of their performance on state assessments, benchmark assessments, or common assessments
- Essential elements for each subject area are articulated in terms of clear learning progressions or scales (i.e., rubrics)
- Goals accompanied by proficiency scales are established for each student in terms of their knowledge gain regarding the essential elements in each subject area
- When asked, students are aware of their status on the achievement goals specific to them
- Students keep data notebooks regarding their individual goals
- When asked, parents are aware of their child's achievement goals
- Student-led conferences focus on the individual student's goals
- Parent-teacher conferences focus on the individual student's goals
- Students perceive that their individual goals are academically challenging

(2) Data are analyzed, interpreted, and used to regularly monitor progress toward achievement goals for individual students.

Examples:

- The status and growth of individual students is regularly analyzed
- When asked, individual students and their parents can describe their achievement status and growth
- Individual student achievement is examined from the perspective of value-added results
- Individual student results from multiple types of assessments are regularly reported and used (e.g., benchmark, common assessments)
- When asked, faculty can describe the different types of individual student reports available to them
- Individual student reports, graphs, and charts are regularly updated to track growth in student achievement
- Teachers regularly analyze school growth data for individual students
- School leadership teams regularly analyze individual student performance

Examples of Criterion (Lagging) Indicators:

- **Written goals are available for each student in terms of their performance on state assessments, benchmark assessments, or common assessments**
- **Documents articulating the learning progression for each essential element are available for each subject area**
- **Written goals are available for each student in terms of their knowledge gain regarding essential elements**
- **Reports, charts, and graphs are available for individual students depicting their status and growth on their learning goals**
- **Report-cards display student status and growth on essential elements and individual learning goals**

Level 5: A Competency-Based System That Ensures Student Mastery of Content

Leading Indicators:

(1) Students move on to the next level of the curriculum for any subject area only after they have demonstrated competence at the previous level.

Examples:

- Clear criteria are established for each essential element regarding minimum scores that demonstrate competence
- A system is in place that tracks each student's status on the essential elements for each subject area at the student's current level
- Student status and progress for each essential element in each subject area is continually monitored
- When students reach criterion scores for the essential elements at a particular level within a subject area, they immediately start working on the elements at the next level

(2) The school schedule is designed to accommodate students moving at a pace appropriate to their backgrounds and needs.

Examples:

- Grade levels are replaced by competency levels
- Multiple venues are available simultaneously (e.g., at the same time) for students to learn and demonstrate competency in the essential elements for each level of each subject area
- Online competency-based instruction and assessment is available in the essential elements for each level of each subject area
- The time it takes for students to move through the various levels of the curriculum for each subject area at each level is constantly monitored

(3) Students who have demonstrated competency levels greater than those articulated in the system are afforded immediate opportunities to begin work on advanced content and/or career paths of interest.

Examples:

- Students who have demonstrated the highest level of competence within a given subject area are provided with opportunities for even more advanced study within that subject area
- Students who have demonstrated competence adequate for high school graduation begin and receive credit for college work
- Students who have demonstrated competence adequate for high school graduation begin and receive credit for work toward a trade that is of interest to them

Examples of Criterion (Lagging) Indicators:

- **A written master plan is available articulating the criterion scores necessary to demonstrate competence for each essential element at each level for each subject area**
- **Reports are available that indicate each student's current status for each essential element at each level for each subject area**
- **A written master plan is available articulating the alternate pathways a student might take to learn and demonstrate competence in each essential element at each level for each subject area**
- **A written master plan is available articulating how students can pursue advanced content, work on college credit, and pursue careers of interest**
- **Reports are available depicting how long students are taking to move through the curriculum for each subject area at each level**

Marzano-Authored Books on Which the Model Is Based

Marzano, R. J., & Simms, J. A. (2012). *Coaching teaching*. Bloomington, IN: Marzano Research Laboratory.

Marzano, R. J. (2012). *Becoming a reflective teacher*. Bloomington, IN: Marzano Research Laboratory.

Marzano, R. J., & Heflebower, T. (2012). *Teaching and assessing 21st century skills*. Bloomington, IN: Marzano Research Laboratory.

DuFour, R., & Marzano, R. J. (2011). *Leaders of learning: How district, school, and classroom leaders improve student achievement*. Bloomington, IN: Solution Tree Press.

Marzano, R. J., Frontier, T., & Livingston, D. (2011). *Effective supervision: Supporting the art and science of teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., & Pickering, D. J. (2011). *The highly engaged classroom*. Bloomington, IN: Marzano Research Laboratory.

Marzano, R. J. (2010). *Formative assessment and standards-based grading*. Bloomington, IN: Marzano Research Laboratory.

Marzano, R. J. (Ed.). (2010). *On excellence in teaching*. Bloomington, IN: Solution Tree Press.

Marzano, R. J. (2010). *Teaching basic and advanced vocabulary: A framework for direct instruction*. Boston: Heinle.

Marzano, R. J. (2009). *Designing and teaching learning goals and objectives*. Bloomington, IN: Marzano Research Laboratory.

Marzano, R. J., & Waters, T. (2009). *District leadership that works: Striking the right balance*. Bloomington, IN: Solution Tree Press.

Marzano, R. J., & Kendall, J. S. (2008) *Designing and assessing educational objectives: Applying the new taxonomy*. Thousand Oaks, CA: Corwin Press.

Marzano R. J., & Haystead, M. W. (2008). *Making standards useful in the classroom*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2007). *The art and science of teaching: A comprehensive framework for effective instruction*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., & Kendall, J. S. (2007). *The new taxonomy of educational objectives* (2nd ed.). Thousand Oaks, CA: Corwin Press.

Marzano, R. J. (2006). *Classroom assessment and grading that work*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., Waters, T., & McNulty, B. (2005). *School leadership that works: From research to results*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2004). *Building background knowledge for academic achievement: Research on what works in schools*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (with Marzano, J. S., & Pickering, D.). (2003). *Classroom management that works: Research-based strategies for every teacher*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2001). *Designing a new taxonomy of educational objectives*. Thousand Oaks, CA: Corwin Press.

Marzano, R. J. (2000). *Transforming classroom grading*. Alexandria, VA: Association for Supervision and Curriculum Development.

Kendall, J. S., & Marzano, R. J. (2000). *Content knowledge: A compendium of standards and benchmarks for K–12 education* (3rd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., & Kendall, J. S. (with Gaddy, B. B.). (1999). *Essential knowledge: The debate over what American students should know*. Aurora, CO: Mid-continent Regional Educational Laboratory.

Marzano, R. J., & Kendall, J. S. (1996). *A comprehensive guide to designing standards-based districts, schools, and classrooms*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., & Paynter, D. E. (1994). *New approaches to literacy: Helping students develop reading and writing skills*. Washington, DC: American Psychological Association.

Marzano, R. J., Pickering, D. J., & McTighe, J. (1993). *Assessing student outcomes: Performance assessment using the dimensions of learning model*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (1992). *A different kind of classroom: Teaching with dimensions of learning*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (1991). *Cultivating thinking in English and the language arts*. Urbana, IL: National Council of Teachers of English.

Marzano, R. J., & Marzano, J. (1988). *A cluster approach to elementary vocabulary instruction*. Newark, DE: International Reading Association.

Marzano, R. J., Brandt, R., Hughes, C., Jones, B., Presseisen, B., Rankin, S., & Suhor, C. (1988). *Dimensions of thinking: A framework for curriculum and instruction*. Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano-Authored Articles, Chapters in Books, and Reports on Which the Model Is Based

Marzano, R. J. (2012). Teaching self-efficacy with personal projects. *Educational Leadership, 69*(8), 86-87.

Marzano, R. J. (2012). A moving proposal. *Educational Leadership, 69*(7), 88-89.

Marzano, R. J. (2012). An easier way to score tests. *Educational Leadership, 69*(6), 82-83.

Marzano, R. J. (2012). Writing to learn. *Educational Leadership, 69*(5), 82–83.

Marzano, R. J. (2011). It's how you use a strategy. *Educational Leadership, 69*(4), 88–89.

Marzano, R. J. (2011). Thought experiments in the classroom. *Educational Leadership, 69*(3), 82–83.

Marzano, R. J., & Heflebower, T. (2011). Grades that show what students know. *Educational Leadership, 69*(3), 34–39.

Marzano, R. J. (2011). Classroom management: Whose job is it? *Educational Leadership 69*(2), 85–86.

Marzano, R. J. (2011). The perils and promises of discovery learning. *Educational Leadership, 69*(1), 86–87.

Marzano, R. J. (2011). Objectives that students understand. *Educational Leadership, 68*(8), 86–87.

Marzano, R. J. (2011). The inner world of teaching. *Educational Leadership, 68*(7), 90–91.

Marzano, R. J. (2011). Relating to students: It's what you do that counts. *Educational Leadership, 68*(6), 82–83.

Marzano, R. J. (2011). Making the most of instructional rounds. *Educational Leadership, 68*(5), 80–81.

Marzano, R. J. (2010). What teachers gain from deliberate practice. *Educational Leadership, 68*(4), 82–85.

Marzano, R. J. (2010). When practice makes perfect…sense. *Educational Leadership, 68*(3), 81–83.

Marzano, R. J. (2010). Reviving reteaching. *Educational Leadership, 68*(2), 82–83.

Marzano, R. J. (2010). High expectations for all. *Educational Leadership, 68*(1), 82–85.

Marzano, R. J. (2010). Representing knowledge nonlinguistically. *Educational Leadership, 67*(8), 84–86.

Marzano, R. J. (2010). Teaching inference. *Educational Leadership, 67*(7), 80–81.

Marzano, R. J. (2010). Summarizing to comprehend. *Educational Leadership, 67*(6), 83–84.

Marzano, R. J. (2010). Using games to enhance student achievement. *Educational Leadership, 67*(5), 71–72.

Loertscher, D. V., & Marzano, R. J. (2010). On excellence in teaching. *Teacher Librarian, 37*(4), 74.

Marzano, R. J. (2009/2010). When students track their progress. *Educational Leadership, 67*(4), 86–87.

Marzano, R. J. (2009). Teaching with interactive whiteboards. *Educational Leadership, 67*(3), 80–82.

Marzano, R. J. (2009). Helping students process information. *Educational Leadership, 67*(2), 86–87.

Marzano, R. J. (2009). Six steps to better vocabulary instruction. *Educational Leadership, 67*(1), 83–84.

DuFour, R., & Marzano, R. J. (2009). High-leverage for principal leadership. *Educational Leadership, 66*(5), 62–68.

Marzano, R. J. (2009). Formative versus summative assessments as measures of student learning. In T. J. Kawolski & T. J. Lasley, (Eds.), *Handbook of data-based decision making in education* (pp. 259–271). New York: Routledge.

Marzano, R. J. (2009). Setting the record straight on "high-yield" strategies. *Phi Delta Kappan, 91*(1), 30–37.

Marzano, R. J. (2007). Using action research and local models of instruction to enhance teaching. *Journal of Personnel Evaluation in Education,* 20(3–4), 117–128.

Marzano, R. J. (2007). Designing a comprehensive approach to classroom assessment. In. D. Reeves (Ed.), *Ahead of the curve: The power of assessment to transform teaching and learning* (pp. 103–126). Bloomington, IN: Solution Tree.

Marzano, R. J. (2007). Leadership and school reform factors. In T. Townsend (Ed.), *International handbook of school effectiveness and improvement* (pp. 597–614). Dordrecht, The Netherlands: Springer.

Waters, J. T., & Marzano, R. J. (2007). School leadership that works: The effect of superintendent leadership on student achievement. *ERS Spectrum: Journal of Research and Information, 25*(2), 1–13.

Marzano, R. J., & Pickering, D. J. (2007). The case for and against homework. *Educational Leadership, 64*(6), 74–79.

Marzano, R. J., & Pickering, D. J. (2007). Errors and allegations about research on homework. *Phi Delta Kappan, 88*(7), 507–513.

Waters, J. T., & Marzano, R. J. (2007). The primacy of superintendent leadership. *The School Administrator, 64*(3), 10–17.

Waters, J. T., & Marzano, R. J. (2006). *School leadership that works: The effect of superintendent leadership on student achievement*. Denver, CO: Mid–continent Research for Education and Learning (available at www.mcrel.org).

Owings, W. A., Kaplan, L. S., Nunnery, J., Marzano, R. J., Myran, S., & Blackburn, D. (2006). Teacher quality and troops to teachers: A national study with implications for principals. *NASSP Bulletin, 90*(2), 87–101.

Waters, J. T., Marzano, R. J., & McNulty, B. (2004). Developing the science of educational leadership. *ERS Spectrum, 22*(1), 4–10.

Waters, J. T., Marzano, R. J., & McNulty, B. (2004). Leadership that sparks learning. *Educational Leadership, 61*(7), 48–52.

Marzano, R. J. (2004). Direct instruction in vocabulary. In B. Williams (Ed.), *Closing the achievement gap* (2nd ed., pp. 48–66). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2004). The developing vision of vocabulary instruction. In J. Bauman & M. Kameenui (Eds.), *Research and theory in vocabulary development* (pp. 100–117). New York: Guilford Press.

Marzano, R. J., & Marzano, J. S. (2003). The key to classroom management. *Educational Leadership, 61*(1), 6–13.

Marzano, R. J. (2003). Forward. In C. A. Ewy, *Teaching with visual frameworks*. Thousand Oaks, CA: Corwin Press.

Marzano, R. J. (2003). Curriculum and instruction: Critical and emerging issues for educational leadership. In W. E. Owings & L. S. Kaplan (Eds.), *Best practices, best thinking, and emerging issues in school leadership* (pp. 65–73). Thousand Oaks, CA: Corwin Press.

Marzano, R. J. (2003). Using data: Two wrongs and a right. *Educational Leadership, 60*(5), 56–61.

Marzano, R. J. (2002). In search of the standardized curriculum. *Principal, 81*(3), 6–9.

Marzano, R. J. (2002). Language, the language arts, and thinking. In J. Flood, J. Jensen, D. Lapp, & J. Squire (Eds.), *Handbook of research on teaching the English language arts* (2nd ed., pp. 687–716). New York: MacMillan Publishing Company with the International Reading Association and the National Council of Teachers of English.

Marzano, R. J. (2002). A comparison of selected methods of scoring classroom assessments. *Applied Measurement in Education, 15*(3), 249–268.

Marzano, R. J., Wassermann, S., Carrol, D. J., Berson, M., Lucas, G., Taylor, M., & Allen, R. (2002). What they're saying. *Curriculum Review, 41*(5), 3.

Marzano, R. J., & Pollock, J. E. (2001). Standards-based thinking and reasoning skills. In A. Costa (Ed.), *Developing Minds* (3rd ed., pp. 29–34). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2001). A new taxonomy of educational objectives. In A. Costa (Ed.), *Developing minds* (3rd ed., pp. 181–189). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2001). *A new era of school reform: Going where the research takes us*. Aurora, CO: Mid-continent Research for Education and Learning.

Scherer, M. (2001). How and why standards can improve student achievement: A conversation with Robert J. Marzano. *Educational Leadership, 59*(1), 14–18.

Marzano, R. J. (2000). Twentieth century advances in instruction. In R. Brandt (Ed.), *ASCD Yearbook, 2000* (pp. 67–90). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (2000). Implementing standards-based education. *Teacher Librarian, 28*(2), 30–32.

Marzano, R. J. (2000). Introduction to the special section. Implementing standards in schools. Updating the standards movement. *NASSP Bulletin, 84*(620), 2–4.

Marzano, R. J. (1999). Eight questions about implementing standards-based education. *Practical Assessment, Research, and Evaluation, 5*(6), 1–12.

Marzano, R. J., Kendall, J. S., & Gaddy, B. B. (1999). What should students know? Local control and the debate over essential knowledge. *American School Board Journal, 186*(9), 47–48, 66–62.

Marzano, R. J., Kendall, J. S., & Cicchinelli, L. (1999). What Americans believe students should know. *Focus on Education, 43*, 9–13.

Marzano, R. J. (1999). Building curriculum and assessment around standards. *The High School Magazine, 6*(5), 14–20.

Marzano, R. J., Kendall, J. S., & Gaddy, B. B. (1999). Deciding on essential knowledge. *Education Week, 18*(32), 68.

Schmoker, M., & Marzano, R. J. (1999). Realizing the promise of standards-based education. *Educational Leadership, 56*(6), 17–21.

Marzano, R. J., Kendall, J. S., & Cicchinelli, L. F. (1998). *What Americans believe students should know: A survey of U.S. adults*. Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 426500)

Marzano, R. J. (1998). Rethinking tests and performance tasks. *The School Administrator, 55*(11), 10–12.

Marzano, R. J., & Kendall, J. S. (1998). *Implementing standards-based education: A guide for the classroom teacher*. Washington, DC: National Education Association.

Marzano, R. J. (1998). What are the general skills of thinking and reasoning and how do you teach them? *The Clearing House, 71*(5), 268–273.

Marzano, R. J. (1998). *A theory-based meta-analysis of research in instruction* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 427 087)

Marzano, R. J. (1998). Cognitive, metacognitive, and conative considerations in classroom assessment. In N. M. Lambert & B. L. McCombs (Eds.), *How students learn: Reforming schools through learner-centered education* (pp. 241–266). Washington, DC: American Psychological Association.

Marzano, R. J., & Kendall, J. S. (1998). *Awash in a sea of standards* (Tech. Rep.). Aurora, CO: Mid-continent Research for Education and Learning.

Marzano, R. J., & Kendall, J. S. (1997). National and state standards: The problems and the promise. *NASSP Bulletin, 81*(590), 26–41.

Marzano, R. J. (1997). Four approaches to implementing standards. *The High School Magazine, 4*(2), 18–31.

Marzano, R. J. (1997). An array of strategies for classroom teachers. *Momentum, 28*(2), 6–11.

Marzano, R. J. (1996). Understanding the complexities of setting performance standards. In R. E. Blum & J. A. Arter (Eds.), *Student performance assessment in an era of restructuring* (Section I–6, pp. 1–8). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (1996). *Eight questions you should ask before implementing standards-based education at the local level*. ERIC Digest. (ED 398642)

Marzano, R. J., & Kendall, J. S. (1996). *The fall and rise of standards-based education*. Alexandria, VA: National Association of State Boards of Education.

Marzano, R. J. (1995). Enhancing thinking and reasoning in the English language arts. In C. N. Hedley, P. Antonacci, & M. Rabinowitz (Eds.), *Thinking and literacy: The mind at work* (pp. 73–100). Hillsdale, NJ: Lawrence Erlbaum.

Marzano, R. J., & Kendall, J. S. (1995). The McREL database: A tool for constructing local standards. *Educational Leadership, 52*(6), 42–47.

Marzano, R. J., Zaffron, S., Zraik, L., Robbins, S. L., & Yoon, L. (1995). A new paradigm for educational change. *Education, 116*(2), 162–173.

Marzano, R. J. (1995). Elements of a comprehensive approach to critical thinking. In J. Block, T. R. Guskey, & S. T. Everson (Eds.), *School improvement programs* (pp. 57–76). New York: Scholastic.

Marzano, R. J. (1994). Commentary on literacy portfolios. In S. W. Valencia, E. H. Hiebert, & P. P. Afflerbach (Eds.), *Authentic reading assessment: Practices and possibilities* (pp. 41–45). Newark, DE: International Reading Association.

Marzano, R. J. (1994). Censorship and the "New Age." In J. S. Simmons (Ed.), *Censorship: A threat to reading, learning, thinking* (pp. 37–44). Newark, DE: International Reading Association.

Marzano, R. J. (1994). Lessons from the field about outcome-based performance assessments. *Educational Leadership, 51*(6), 44–50.

Marzano, R. J. (1993). Teaching and reinforcing higher order thinking in English and the language arts. In A. C. Purves (Ed.), *The encyclopedia of English studies and the language arts* (Vol. I, pp. 563–566). New York: Scholastic.

Marzano, R. J. (1993). How teachers approach the teaching of thinking. *Theory into Practice, 32*(3), 154–160.

Marzano, R. J. (1992). The many faces of cooperation across the dimensions of learning. In N. Davidson & T. Worsham (Eds.), *Enhancing thinking through cooperative learning* (pp. 7–28). New York: Teacher's College Press.

Marzano, R. J. (1992). The rationale and framework for teaching thinking tactics. In J. W. Keefe & H. Walberg (Eds.), *Teaching for thinking* (pp. 15–26). Reston, VA: National Association for Secondary School Principals.

Marzano, R. J. (1992). Toward a theory-based review of research in vocabulary. In C. Gordon, G. Labercane, & W. R. McEachern (Eds.), *Elementary reading: Process and practice* (pp. 29–45). New York: Ginn.

Marzano, R. J. (1992). Curriculum integration in the middle school. *Teaching PreK–8, 23*(3), 14–16.

Marzano, R. J. (1991). Fostering thinking across the curriculum through knowledge restructuring. *Journal of Reading, 34*(7), 518–525.

Marzano, R. J. (1991). What it really means to be a critical thinker. *Teaching: K–8, 21*(2), 6.

Marzano, R. J. (1991). Language, the language arts and the teaching of thinking. In J. Flood, J. Jensen, D. Lapp, & J. Squire (Eds.), *Handbook of research in teaching the English language arts* (pp. 559–586). New York: MacMillan Publishing Company with the International Reading Association and the National Council of Teachers of English.

Marzano, R. J. (1991). Creating an educational paradigm centered on learning through teacher directed naturalistic inquiry. In L. Idol & B. F. Jones (Eds.), *Educational values and cognitive instruction: Implication for reform* (pp. 411–442). Hillsdale, NJ: Lawrence Erlbaum.

Marzano, R. J., Brandt, R., Hughes, C., Jones, B., Presseisen, B., Rankin, S., & Suhor, C. (1991). Dimensions of thinking: A framework for curriculum and instruction. In A. Costa (Ed.), *Developing minds: A resource book for teaching thinking* (Vol. 1, pp. 89–93). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J., & Pickering, D. (1991). Dimensions of learning: An integrative instructional framework. In A. Costa (Ed.), *Developing minds: A resource book for teaching thinking* (Vol. 1, pp. 94–99). Alexandria, VA: Association for Supervision and Curriculum Development.

Marzano, R. J. (1991). Tactics for thinking: A program for initiating the teaching of thinking. In A. Costa (Ed.), *Developing minds: Programs for teaching thinking* (Vol. 1, pp. 65–68). Alexandria, VA: Association for Supervision and Curriculum Development.

McCombs, B. L., & Marzano, R. J. (1990). Putting the self in self-regulated learning. *Educational Psychologist, 25*(1), 51–69.

Marzano, R. J. (1990). Standardized tests: Do they measure general cognitive abilities? *NASSP Bulletin, 74*(526), 93–101.

Marzano, R. J., Pickering, D., & Brandt, R. S. (1990). Integrating instructional programs through Dimensions of Learning. *Educational Leadership, 47*(5), 17–24.

McCombs, B. L., & Marzano, R. J. (1989). Integrating skill and will in self-regulation. *Teaching Thinking and Problem Solving, 11*(5), 5–8.

Marzano, R. J., & Ewy, R. (1989, August). Thinking for tomorrow. *Vocational Education Journal*, 28–31.

Marzano, R. J. (1989). *Summary report: Evaluations of the tactics for thinking program* (Tech. Rep.). Alexandria, VA: Association for Supervision and Curriculum Development. (ERIC Document Reproduction Service No. ED 314710)

Marzano, R. J., & Marzano, J. (1988). Toward a cognitive theory of commitment and its implications for therapy. *Psychotherapy in Private Practice 6*(4), 69–81.

Marzano, R. J. (1988). Metacognition: The first step in teaching thinking. *Professional Handbook for the Language Arts*. Morristown, NJ: Silver Burdett and Ginn.

Marzano, R. J., & Costa, A. (1988). Question: Do standardized tests measure general cognitive skills? Answer: No. *Educational Leadership, 45*(8), 66–73.

Marzano, R. J. (1987). *Decomposing curricular objectives to increase the specificity of instruction* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 290 220)

Marzano, R. J. (1987). Staff development for teaching thinking: A matter of restructuring. *Journal of Staff Development, 8*(3), 6–10.

Marzano, R. J. (1987). *A study of inference in standardized reading test items and its relationship to item difficulty* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 291002)

Marzano, R. J. (1987). Creating a context for learning. *Iowa Educational Leadership, 3*(2), 6–10.

Marzano, R. J. (1987). Policy constraints to the teaching of thinking. *The Journal of State Governments, 60*(2), 64–67.

Costa, A., & Marzano, R. J. (1987). Teaching the language of cognition. *Educational Leadership, 45*(2), 29–34.

Marzano, R. J. (1986). Theory into practice: Critical thinking. *Cogitare, 1*(4), 3–4.

Marzano, R. J. (1986). Theory into practice: Schema development and thinking. *Cogitare, 1*(3), 3–4.

Arredondo, D., & Marzano, R. J. (1986). One district's approach to implementing a comprehensive K–12 thinking skills program. *Educational Leadership, 43*(8), 28–30.

Marzano, R. J., & Arredondo, D. (1986). Restructuring schools through the teaching of thinking. *Educational Leadership, 43*(8), 20–26.

Marzano, R. J., & Hutchins, C. L. (1985). *Thinking skills: A conceptual framework*. Aurora, CO: Mid-continent Regional Educational Laboratory.

Marzano, R. J. (1985). Theory into practice: Self-efficacy and thinking. *Cogitare, 1*(2), 4–5.

Marzano, R. J. (1985). *Integrated instruction in learning-to-learn skills, thinking skills, traditional content and basic beliefs: A necessary unity* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 267906)

Marzano, R. J. (1985). [Review of the book *The wordtree*]. *Journal of Reading, 29*(7), 655–656.

Marzano, R. J. (1985). *A unitary model of cognition and instruction in higher order thinking skills* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 261761)

Conyers, J., Andrews, K., & Marzano, R. J. (1985). Developing district made criterion referenced tests: A standard of excellence for effective schools. *Education, 106*(2), 141–149.

Marzano, R. J., & Dole, J. (1985). *Teaching basic relationships and patterns of information* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory.

Marzano, R. J., & Dole, J. (1985). Teaching the basic relationships between sentences to improve comprehension. *Australian Journal of Reading, 1*, 28–38.

Marzano, R. J., & Dole, J. (1985). Teaching the basic relationships between sentences. *Reading (England), 19*(1), 24–35.

Marzano, R. J. (1984). *The systematic teaching and reinforcing of thinking and reasoning skills within content area classrooms* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 245045)

Marzano, R. J. (1984). *A language/interaction approach to teaching thinking* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 252814)

Marzano, R. J. (1984). *The theoretical framework for an instructional model of higher order thinking skills* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 248045)

Marzano, R. J. (1984). A cluster approach to vocabulary instruction: A new direction from the research literature. *The Reading Teacher, 38*(2), 168–173.

Guzzetti, B., & Marzano, R. J. (1984). Correlates of effective reading instruction. *The Reading Teacher, 37*(8), 754–760.

Marzano, R. J., Guzzetti, B., & Hutchins, C. L. (1984). *A study of selected school effectiveness variables: Some correlates that are not causes* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 253328)

Marzano, R. J. (1983). *Toward a working model of cohesion and coherence in writing*. (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 241930)

Marzano, R. J. (1983). *A concept development approach to vocabulary instruction* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 237940)

Marzano, R. J. (1983). *Toward a model of higher order thinking skills* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 234897)

Marzano, R. J. (1982). *Principles of discourse analysis: Explanation and application*. (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 218635)

Marzano, R. J. (1982). Identifying various types of student writing problems. *Journal of Reading, 25*(5), 408–411.

Marzano, R. J., & Hutchins, C. L. (1982). *Measuring academic efficiency at the school level* (Tech. Rep.). Aurora, CO: Mid-continent Regional Educational Laboratory. (ERIC Document Reproduction Service No. ED 241576)

