Marzano's (Nine) High-Yield Instructional Strategies

Adapted from the book: *Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement*, Marzano (2001).

High Yield Instructional Strategies	What the Research Says	How it Looks in the Classroom
Identifying Similarities and Differences ***(Yields a 45 percentile gain)***	Students should compare, classify, and create metaphors, analogies and non-linguistic or graphic representations	Thinking Maps, T-charts, Venn diagrams, classifying, analogies, cause and effect links, compare and contrast organizers, QAR (Question/Answer/Relationship), Sketch to Stretch, affinity diagrams, Frayer model.
Summarizing and Note Taking ***(Yields a 34 percentile gain***	Students should learn to eliminate unnecessary information, substitute some information, keep important information, write / rewrite, and analyze information. Students should be encouraged to put some information into own words.	Teacher models summarization techniques, identify key concepts, bullets, outlines, clusters, narrative organizers, journal summaries, break down assignments, create simple reports, quick writes, graphic organizers, column notes, affinity diagrams, etc.
Reinforcing Effort / Providing Recognition **(*Yields a 29 percentile gain)***	Teachers should reward based on standards of performance; use symbolic recognition rather than just tangible rewards.	Hold high expectations, display finished products, praise students' effort, encourage students to share ideas and express their thoughts, honor individual learning styles, conference individually with students, authentic portfolios, stress-free environment, high fives, Spelling Bee, Constitution Day, School Newspaper, etc.
Homework and Practice ***(Yields a 28 percentile gain)***	Teachers should vary the amount of homework based on student grade level (less at the elementary level, more at the secondary level), keep parent involvement in homework to a minimum, state purpose, and, if assigned, should be debriefed.	Retell, recite, and review learning for the day at home; reflective journals; inform parents of the goals and objectives; grade level teams plan together for homework distribution; SLCs; teacher email.

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Nonlinguistic Representations ***(Yields a 27 percentile gain)***	Students should create graphic representations, models, mental pictures, drawings, pictographs, and participate in kinesthetic (hands-on) activities in order to assimilate knowledge.	Visual tools and manipulatives, problem-solution organizers, spider webs, diagrams, concept maps, drawings, charts, thinking maps, graphic organizers, sketch to stretch, storyboards, foldable, act out content, make physical models, etc.
Cooperative Learning ***(Yields a 23 percentile gain)***	Teachers should limit use of ability groups, keep groups small, apply strategy consistently and systematically but not overuse. Assign roles and responsibilities in groups.	Integrate content and language through group engagement, reader's theatre, pass the pencil, circle of friends, cube it, radio reading, shared reading and writing, plays, science projects, debates, jigsaw, group reports, choral reading, affinity diagrams,
Setting Objectives / Providing Feedback ***(Yields a 23 percentile gain)***	Teachers should create specific but flexible goals, allowing some student choice. Teacher feedback should be corrective, timely, and specific to a criterion.	Articulating and displaying learning goals, KWL, contract learning goals, etc. Teacher can display objectives on the in-focus projector and follow-up on the mastery of the objective at the end of the lesson.
Generating and Testing Hypothesis ***(Yields a 23 percentile gain)***	Students should generate, explain, test and defend hypotheses using both inductive and deductive strategies through problem solving, history investigation, invention, experimental inquiry, and decision making.	Thinking processes, constructivist practices, investigate, explore, social construction of knowledge, use of inductive and deductive reasoning, questioning the author of a book, finding other ways to solve same math problem, etc.
Questions, Cues, and Advance Organizers ***(Yields a 22 percentile gain)***	Teachers should use cues and questions that focus on what is important (rather than unusual), use ample wait time before accepting responses, eliciting inference and analysis. Advance organizers should focus on what is important and are more useful with information that is not well organized.	Graphic organizers**,** provide guiding questions before each lesson, think aloud, inferences, predicting, drawing conclusions, skim chapters to identify key vocabulary, concepts and skills, foldables**,** annotating the text**,** etc.