

Marzano's High-Yield Instructional Strategies

In Classroom Instruction that Works: Research-based Strategies for Increasing Student Achievement, Robert Marzano (2001) and his colleagues identify nine high-yield instructional strategies through a meta-analysis of over 100 independent studies. They determined that these nine strategies have the greatest positive affect in student on student achievement for all students, in all subject areas, at all grade levels. Marzano's nine high-yield instructional strategies are summarized in the table that follows.

High Yield Instructional Strategies	Research says	Examples
Identifying similarities and differences	Students should compare, classify, and create metaphors, analogies, and graphic representations.	T-charts, Venn diagrams, classifying, analogies, cause and effect lings, compare and contrast organizers, QAR, sketch to stretch, affinity, Frayer model , etc.
Summarizing and note taking	Students should learn to delete unnecessary information, keep important information, write/rewrite, and analyze information.	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 , etc.
Reinforcing effort and providing recognition	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 etc.
Homework and practice	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, parents are informed of the goals and objectives, interdisciplinary teams plan together for homework distribution, etc.

<p>Non linguistic representations</p>	<p>Students should create graphic representations, models, mental pictures, drawings, pictographs, and participate in kinesthetic activity in order to assimilate knowledge.</p>	<p>Visual tools, and manipulatives, problem-solution organizers, spider webs, diagrams, concept maps, drawings, maps sketch to stretch, KIM</p>
<p>Cooperative learning</p>	<p>Teachers should limit use of ability groups, keep groups small, apply strategy consistently and systematically but not overuse.</p>	<p>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, etc.</p>
<p>Setting objectives and providing feedback</p>	<p>Teachers should create specific but flexible goals, allowing some student choice, Teacher feedback should be corrective, timely and specific to a criterion.</p>	<p>Articulating and displaying learning goals, KWL, contract learning goals, etc.</p>
<p>Generating and testing hypothesis</p>	<p>Students should generate, explain, test, and defend, hypothesis using both inductive and deductive strategies through problem solving, history investigation, invention, experimental inquiry, and decision-making.</p>	<p>Thinking processes, constructivist practices, investigate, explore, social construction of knowledge, use of inductive and deductive reasoning, questioning the author, etc.</p>
<p>Questions, cues, and advance organizers</p>	<p>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.</p>	<p>Graphic organizers, provide guiding questions before each lesson, think a-louds, inferencing, predicting, drasing conclusions, skim chapters to identify key vocabulary, concepts and skills, ACE anticipation guide, annotating the text, etc.</p>