

The following information is provided to assist with your lesson planning. More information regarding any of these strategies is available through your Mentors or independent research on the Internet or Professional libraries.

## **Marzano's Instructional Strategies**

### ***Setting Objectives and Providing Feedback***

Provide students with a direction for learning and with information about how well they are performing relative to a particular learning objective so they can improve their performance.

### ***Reinforcing Effort and Providing Recognition***

Enhance students' understanding of the relationship between effort and achievement by addressing students' attitudes and beliefs about learning.

Provide students with abstract tokens of recognition or praise for their accomplishments related to the attainment of a goal.

### ***Cooperative Learning***

Provide students with opportunities to interact with one another in ways that enhance their learning.

### ***Cues, Questions, and Advance Organizers***

Enhance students' ability to retrieve, use, and organize what they already know about a topic.

### ***Nonlinguistic Representations***

Enhance students' ability to represent and elaborate on knowledge using mental images.

### ***Summarizing and Note Taking***

Enhance students' ability to synthesize information and organize it in a way that captures the main ideas and supporting details.

### ***Assigning Homework and Providing Practice***

Extend the learning opportunities for students to practice, review, and apply knowledge.

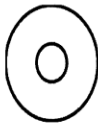

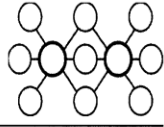
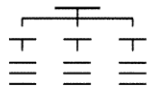
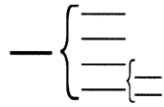
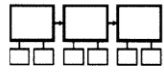
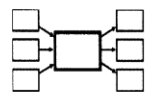

Enhance students' ability to reach the expected level of proficiency for a skill or process.

### ***Identifying Similarities and Differences***

Enhance students' understanding of and ability to use knowledge by engaging them in mental processes that involve identifying ways in which items are alike and different.

### ***Generating and Testing Hypotheses***

Enhance students' understanding of and ability to use knowledge by engaging them in mental processes that involve making and testing hypotheses.

Thinking Maps	Brain Compatible Teaching Strategies
<p style="text-align: center;"><i>Thinking Maps®: A Language for Learning</i></p> <hr/> <div style="display: flex; align-items: center; margin-bottom: 10px;"> <div style="border: 1px solid black; padding: 5px; margin-right: 10px;"> <b>THINKING PROCESSES</b> </div> <div style="font-size: 20px; margin-right: 10px;">→</div> <div style="border: 1px solid black; padding: 5px;"> <b>THINKING MAPS AS TOOLS</b> </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-bottom: 10px;"> <div style="width: 30%;"><b>DEFINING IN CONTEXT</b></div> <div style="width: 20%;">Circle Map</div> <div style="width: 40%; text-align: center;">  </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-bottom: 10px;"> <div style="width: 30%;"><b>DESCRIBING QUALITIES</b></div> <div style="width: 20%;">Bubble Map</div> <div style="width: 40%; text-align: center;">  </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-bottom: 10px;"> <div style="width: 30%;"><b>COMPARING AND CONTRASTING</b></div> <div style="width: 20%;">Double Bubble Map</div> <div style="width: 40%; text-align: center;">  </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-bottom: 10px;"> <div style="width: 30%;"><b>CLASSIFYING</b></div> <div style="width: 20%;">Tree Map</div> <div style="width: 40%; text-align: center;">  </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-bottom: 10px;"> <div style="width: 30%;"><b>PART-WHOLE</b></div> <div style="width: 20%;">Brace Map</div> <div style="width: 40%; text-align: center;">  </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-bottom: 10px;"> <div style="width: 30%;"><b>SEQUENCING</b></div> <div style="width: 20%;">Flow Map</div> <div style="width: 40%; text-align: center;">  </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start; margin-bottom: 10px;"> <div style="width: 30%;"><b>CAUSE AND EFFECT</b></div> <div style="width: 20%;">Multi-Flow Map</div> <div style="width: 40%; text-align: center;">  </div> </div> <hr/> <div style="display: flex; justify-content: space-between; align-items: flex-start;"> <div style="width: 30%;"><b>SEEING ANALOGIES</b></div> <div style="width: 20%;">Bridge Map</div> <div style="width: 40%; text-align: center;">  </div> </div> <hr/> <p style="text-align: center; font-size: 8px;">             THINKING MAPS, INC.              © 2007 All Rights Reserved         </p>	
	<ol style="list-style-type: none"> <li>1. Humor</li> <li>2. Storytelling</li> <li>3. Brainstorming</li> <li>4. Movement</li> <li>5. Drawing and Artwork</li> <li>6. Music</li> <li>7. Graphic Organizers</li> <li>8. Visuals</li> <li>9. Visualization and Guided Imagery</li> <li>10. Manipulatives</li> <li>11. Metaphors</li> <li>12. Mnemonic Devices</li> <li>13. Games</li> <li>14. Technology</li> <li>15. Role Play</li> <li>16. Cooperative Learning</li> <li>17. Project Based</li> <li>18. Journals</li> <li>19. Work Study</li> <li>20. Field Trips</li> </ol>

## Additional information about the components of the plan:

### Lesson Plan Overview / Details

Summary of the task, challenge, investigation, career-related scenario, problem, or community link

#### Hook/Set

##### Getting Started/Essential Question

Also called a "hook" to grab the students' attention, the Hook Activity is a brief activity or event at the beginning of the lesson that effectively engages all students' attention and focuses their thoughts on the learning objective(s). Your Essential Question encourages students to put forth more effort when faced with a complex, open-ended, challenging, meaningful and authentic questions.

Have students:

- Observe a scenario or process
- Listen to a story
- Predict an outcome
- Inspect a machine, tool, part or instrument
- Assess prior knowledge
- Review an external document (article, ad, interview or job application)
- Connect learning objectives to prior knowledge, experiences, observations, feelings, or situations in their daily lives both inside and outside of school

#### Lecture

##### Discover/Explain

The teacher provides the basic information needed for students to gain the knowledge or skill through brief, direct instruction.

Teacher might:

- State learning objectives of the day in easy, accessible language; display standards and objectives
- Introduce/review vocabulary terms
- Identify how students will be assessed
- Provide detailed overview of skill or process
- Induce curiosity and suspense
- Incorporate multimedia and technology
- Illuminate where this skill/info is applied in the field
- Connect standards to real-world and help students "make sense" of the content

Students should:

- Build on experiences and background knowledge
- Organize information
- Incorporate literacy strategies through teacher prepared, interactive, or combination note taking (graphic organizers)

##### Demo/Modeling: I DO

This part of the Discover/Explain process provides students with proficient modeling by the teacher.

Teacher should:

- Explain critical aspects moving from basic to complex
- Reinforce understanding through labeling, categorizing, explaining, comparing
- Balance talking with showing
- Provide student with choices
- Identify real application of skill in workplace

Students should:

- Follow along closely and ask questions
- Take notes or diagram a sequence
- Follow along or perform steps themselves

### **Checking Understanding Formative Assessment**

Continuous monitoring of whether or not a student "got it"

Teacher should:

- Summarize process or knowledge
- Ask questions that go beyond recall
- Clarify expectations and allow students to redo

Students Should:

- Know their roles in grouping arrangements (either as whole class, small groups, pairs, individual, etc.)
- Be held accountable for their work

### **Guided Practice (Group Work or Lab): WE DO**

An opportunity for each student to demonstrate grasp of new learning by working through an activity or exercise under the teacher's direct supervision and support.

Teacher should:

- Give oral/written feedback that is focused and frequent
- Circulate, support engagement, and monitor student work
- Monitor and adjust instruction based on student feedback Guide whole group
- Remind students of required elements for summative assessment; clarify expectations
- Target and build on one or more dimensions of the Competency Attainment Rubric Categories

Students should:

- Go through all steps of the process or items to be learned
- Have assistance from teacher and solve routine and authentic problems
- Generate a variety of ideas and alternatives
- Analyze problems from multiple perspectives
- Self assess and monitor own learning

### **Independent Practice (Lab): YOU DO**

To help students reach proficiency, next is reinforcement practice. Applies knowledge to new situations to complete a relevant project (this may happen in class or in extended time such as homework).

Teachers should:

- Define proficiency and mastery
- Provide assistance materials such as safety posters, etc.
- Provide clear expectations for performance, timelines, evaluation elements (rubric), etc...
- Provide regular opportunities to accommodate individual student needs; Sometimes provide differentiated instructional methods and content
- Measure student performance in more than three ways (in the form of a project, experiment, presentation, essay, short answer, or multiple choice test)
- Collect evidence that most students demonstrate mastery of the objective

Students should:

- Work independently
- Have less direct guidance and intervention as deemed safe and appropriate
- Use their notes and materials to assist with recall and performance
- Problem solve and monitor their own learning gaps in relation to what will be expected of them on the summative assessment

**Closure**

Designed to help students bring things together.

Teachers should:

- Provide informal review of proficiency and determine if gaps exist on behalf of individuals and/or class
- Review standards and objectives covered
- Remind what this is leading up to

Students should:

- Assess their own performance/learning (in groups, pairs or individually)
- Individually review steps, procedures, information to increase performance
- Connect content to powerful questions or ideas

**Assessment**

Students provide evidence of their proficiency.

Teachers should:

- Assess knowledge/skills for each individual student
- Provide feedback in accordance with rubric and/or expectations for performance
- Look for ways to exhibit student work beyond the classroom for authentic feedback

Students should:

- Organize, interpret, analyze, synthesize, and evaluate information rather than reproduce it
- Use practical thinking by applying and implementing what they learn in real-life scenarios
- Draw conclusions, make generalizations, and produce arguments that are supported through extended writing
- Model appropriate soft skills, ethical and occupational safety behaviors
- Identify gaps in learning by self-evaluation