Marzano’s Nine Top Strategies

*Questions, Cues, and Advanced Organizers
## Categories of Instructional Strategies That Affect Student Achievement

<table>
<thead>
<tr>
<th>Category</th>
<th>Average Effect Size</th>
<th>Percentile Gain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identifying similarities and differences</td>
<td>1.61</td>
<td>45</td>
</tr>
<tr>
<td>Summarizing and note taking</td>
<td>1.00</td>
<td>34</td>
</tr>
<tr>
<td>Reinforcing effort and providing recognition</td>
<td>.80</td>
<td>29</td>
</tr>
<tr>
<td>Homework and practice</td>
<td>.77</td>
<td>28</td>
</tr>
<tr>
<td>Nonlinguistic representation</td>
<td>.75</td>
<td>27</td>
</tr>
<tr>
<td>Cooperative learning</td>
<td>.73</td>
<td>27</td>
</tr>
<tr>
<td>Setting objectives and providing feedback</td>
<td>.61</td>
<td>23</td>
</tr>
<tr>
<td>Generating and testing hypotheses</td>
<td>.61</td>
<td>23</td>
</tr>
<tr>
<td>Questions, cues, and advance organizers</td>
<td>.59</td>
<td>22</td>
</tr>
</tbody>
</table>
# 9 Cues, Questions, and Advance Organizers

- Cues and questions should focus on what is important as opposed to what is unusual
  - Questions designed for deeper understanding will increase student interest

- “Higher level” questions produce a deeper learning than “lower level” questions
  - Questions should require students to analyze information rather than just recall
  - Students should be asked to restructure information or apply knowledge in some way
# 9 Cues, Questions, and Advance Organizers

- Waiting briefly before accepting responses from students had the effect of increasing the depth of students’ answers.

- Questions are effective learning tools even when asked before a learning experience:
  - Helps set the mental process of the learning experience.
# 9 Cues, Questions, and Advance Organizers

- Explicit Cues:
  - provides students with a preview of what they are about to experience
  - Examples:
    - **Things/people**: What is the process for making this thing?
    - **Actions**: How is the value of this thing changed by this action?
    - **Events**: What people are usually involved in this type of event?
    - **States (of being)**: What is the basic process involved in reaching this state?
# 9 Cues, Questions, and Advance Organizers

**Definition of Analytical Skills**

- **Analyzing Errors**
  - Identifying and articulating errors in the logic of information

- **Constructing Support**
  - Constructing a system of support or proof for an assertion

- **Analyzing Perspectives**
  - Identifying and articulating personal perspectives about issues
# 9 Cues, Questions, and Advance Organizers

• Examples of Analytical Questions
  – Analyzing Errors:
    • How is this information misleading?
  – Constructing Support:
    • What is an argument that would support the following claim?
  – Analyzing perspectives:
    • Why would someone consider this to be good (bad, or neutral)?
# 9 Cues, Questions, and Advance Organizers

- **Advance Organizers:**
  - Bridges the *gap* between what the learner already knows and what he needs to know

  - A.O. should focus on what is important
  - Higher level A.O.s produce deeper understandings
  - A.O.s are most useful w/ information that is not well organized
  - Different A.O.s produce different results
# 9 Cues, Questions, and Advance Organizers

- **Expository Advance Organizer**
  - Describes new content to be learned (analogy: annotated bibliography)

- **Narrative Advance Organizer**
  - Presents information in story format
    (example: personal story)

- **Skimming Advance Organizer**
  - Briefly becoming familiar with information
    (example: table of contents review)

- **Graphic Advance Organizer**
  - Partially completed web as a preview to be completed as information is presented