Marzano Protocol: Lesson Segments Addressing Content

Design Question #2: What will I do to help students effectively interact with new knowledge?

1. Identifying Critical Information

The teacher identifies a lesson or part of a lesson as involving important information to which students should pay particular attention.

Teacher Evidence
- Teacher begins the lesson by explaining why upcoming content is important
- Teacher tells students to get ready for some important information
- Teacher cues the importance of upcoming information in some indirect fashion
  - Tone of voice
  - Body position
  - Level of excitement

Student Evidence
- When asked, students can describe the level of importance of the information addressed in class
- When asked, students can explain why the content is important to pay attention to
- Students visibly adjust their level of engagement

Scale Levels: (choose one)
- Innovating
- Applying
- Developing
- Beginning
- Not Using
- Not Applicable

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<td>Signals to students which content is critical versus non-critical and monitors the extent to which students are attending to critical information.</td>
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Reflection Questions

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<td>How might you adapt and create new strategies for identifying critical information that address unique student needs and situations?</td>
<td>In addition to signaling to students which content is critical versus non-critical, how might you monitor the extent to which students attend to critical information?</td>
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## 2. Organizing Students to Interact with New Knowledge

The teacher organizes students into small groups to facilitate the processing of new information.

### Teacher Evidence
- Teacher has established routines for student grouping and student interaction in groups
- Teacher organizes students into ad hoc groups for the lesson
  - Diads
  - Triads
  - Small groups up to about 5

### Student Evidence
- Students move to groups in an orderly fashion
- Students appear to understand expectations about appropriate behavior in groups
  - Respect opinions of others
  - Add their perspective to discussions
  - Ask and answer questions

### Scale Levels: (choose one)
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<td>Adapts and creates new strategies for unique student needs and situations.</td>
<td>Organizes students into small groups to facilitate the processing of new knowledge and monitors group processing.</td>
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3. Previewing New Content

The teacher engages students in activities that help them link what they already know to the new content about to be addressed and facilitates these linkages.

Teacher Evidence
- Teacher uses preview question before reading
- Teacher uses K-W-L strategy or variation of it
- Teacher asks or reminds students what they already know about the topic
- Teacher provides an advanced organizer
  - Outline
  - Graphic organizer
- Teacher has students brainstorm
- Teacher uses anticipation guide
- Teacher uses motivational hook/launching activity
  - Anecdotes
  - Short selection from video
- Teacher uses word splash activity to connect vocabulary to upcoming content

Student Evidence
- When asked, students can explain linkages with prior knowledge
- When asked, students make predictions about upcoming content
- When asked, students can provide a purpose for what they are about to learn
- Students actively engage in previewing activities

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<td>Adapts and creates new strategies for unique student needs and situations.</td>
<td>Engages students in learning activities that require them to preview and link new knowledge to what has been addressed and monitors the extent to which students are making linkages.</td>
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## 4. Chunking Content into “Digestible Bites”

Based on student needs, the teacher breaks the content into small chunks (i.e. digestible bites) of information that can be easily processed by students.

### Teacher Evidence
- Teacher stops at strategic points in a verbal presentation
- While playing a video tape, the teacher turns the tape off at key junctures
- While providing a demonstration, the teacher stops at strategic points
- While students are reading information or stories orally as a class, the teacher stops at strategic points

### Student Evidence
- When asked, students can explain why the teacher is stopping at various points
- Students appear to know what is expected of them when the teacher stops at strategic points

### Scale Levels: (choose one)

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<td>Breaks input experiences into small chunks based on student needs and monitors the extent to which chunks are appropriate.</td>
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### 5. Processing New Information

During breaks in the presentation of content, the teacher engages students in actively processing new information.

#### Teacher Evidence
- Teacher has group members summarize new information
- Teacher employs formal group processing strategies
  - Jigsaw
  - Reciprocal Teaching
  - Concept attainment

#### Student Evidence
- When asked, students can explain what they have just learned
- Students volunteer predictions
- Students voluntarily ask clarification questions
- Groups are actively discussing the content
  - Group members ask each other and answer questions about the information
  - Group members make predictions about what they expect next

#### Scale Levels: *(choose one)*
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6. Elaborating on New Information

The teacher asks questions or engages students in activities that require elaborative inferences that go beyond what was explicitly taught.

**Teacher Evidence**
- Teacher asks explicit questions that require students to make elaborative inferences about the content
- Teacher asks students to explain and defend their inferences
- Teacher presents situations or problems that require inferences

**Student Evidence**
- Students volunteer answers to inferential questions
- Students provide explanations and “proofs” for inferences

**Scale Levels: (choose one)**
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7. Recording and Representing Knowledge

The teacher engages students in activities that help them record their understanding of new content in linguistic ways and/or represent the content in nonlinguistic ways.

Teacher Evidence
- Teacher asks students to summarize the information they have learned
- Teacher asks students to generate notes that identify critical information in the content
- Teacher asks students to create nonlinguistic representations for new content
  - Graphic organizers
  - Pictures
  - Pictographs
  - Flow charts
- Teacher asks students to create mnemonics that organize the content

Student Evidence
- Students’ summaries and notes include critical content
- Students’ nonlinguistic representations include critical content
- When asked, students can explain main points of the lesson

Scale Levels: (choose one)
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8. Reflecting on Learning

The teacher engages students in activities that help them reflect on their learning and the learning process.

Teacher Evidence
☑ Teacher asks students to state or record what they are clear about and what they are confused about
☑ Teacher asks students to state or record how hard they tried
☑ Teacher asks students to state or record what they might have done to enhance their learning

Student Evidence
☑ When asked, students can explain what they are clear about and what they are confused about
☑ When asked, students can describe how hard they tried
☑ When asked, students can explain what they could have done to enhance their learning

Scale Levels: (choose one)
☐ Innovating ☐ Applying ☐ Developing ☐ Beginning ☐ Not Using ☐ Not Applicable

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<td>Adapts and creates new strategies for unique student needs and situations.</td>
<td>Engages students in reflecting on their own learning and the learning process and monitors the extent to which students self-assess their understanding and effort.</td>
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9. Student Interviews

Student Questions:
- Why is the information that you are learning today important?
- How do you know what are the most important things to pay attention to?
- What are the main points of this lesson?
Design Question #3: What will I do to help students practice and deepen their understanding of new knowledge?

1. Reviewing Content

The teacher engages students in a brief review of content that highlights the critical information.

**Teacher Evidence**
- Teacher begins the lesson with a brief review of content
- Teacher uses specific strategies to review information
  - Summary
  - Problem that must be solved using previous information
  - Questions that require a review of content
  - Demonstration
  - Brief practice test or exercise

**Student Evidence**
- When asked, students can describe the previous content on which new lesson is based
- Student responses to class activities indicate that they recall previous content

**Scale Levels: (choose one)**
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<td>Adapts and creates new strategies for unique student needs and situations.</td>
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## 2. Organizing Students to Practice and Deepen Knowledge

The teacher uses grouping in ways that facilitate practicing and deepening knowledge.

### Teacher Evidence
- Teacher organizes students into groups with the expressed idea of deepening their knowledge of informational content.
- Teacher organizes students into groups with the expressed idea of practicing a skill, strategy, or process.

### Student Evidence
- When asked, students explain how the group work supports their learning.
- While in groups students interact in explicit ways to deepen their knowledge of informational content or practice a skill, strategy, or process:
  - Asking each other questions
  - Obtaining feedback from their peers

### Scale Levels: *(choose one)*
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3. Using Homework

When appropriate (as opposed to routinely) the teacher designs homework to deepen students’ knowledge of informational content or, practice a skill, strategy, or process.

**Teacher Evidence**
- Teacher communicates a clear purpose for homework
- Teacher extends an activity that was begun in class to provide students with more time
- Teacher assigns a well crafted homework assignment that allows students to practice and deepen their knowledge independently

**Student Evidence**
- When asked, students can describe how the homework assignment will deepen their understanding of informational content or, help them practice a skill, strategy, or process
- Students ask clarifying questions of the homework that help them understand its purpose

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<td>Adapts and creates new strategies for unique student needs and situations.</td>
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4. Examining Similarities and Differences

When the content is informational, the teacher helps students deepen their knowledge by examining similarities and differences.

**Teacher Evidence**
- Teacher engages students in activities that require students to examine similarities and differences between content
  - Comparison activities
  - Classifying activities
  - Analogy activities
  - Metaphor activities
- Teacher facilitates the use of these activities to help students deepen their understanding of content
  - Ask students to summarize what they have learned from the activity
  - Ask students to explain how the activity has added to their understanding

**Student Evidence**
- Student artifacts indicate that their knowledge has been extended as a result of the activity
- When asked about the activity, student responses indicate that they have deepened their understanding
- When asked, students can explain similarities and differences
- Student artifacts indicate that they can identify similarities and differences

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<th>Examing similarities and differences</th>
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<td>Adapts and creates new strategies for unique student needs and situations.</td>
<td>When content is informational, engages students in activities that require them to examine similarities and differences, and monitors the extent to which the students are deepening their knowledge.</td>
<td>When content is informational, engages students in activities that require them to examine similarities and differences.</td>
<td>Uses strategy incorrectly or with parts missing.</td>
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**Reflection Questions**

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<td>What are you learning about your students as you adapt and create new strategies?</td>
<td>How might you adapt and create new strategies for examining similarities and differences that address unique student needs and situations?</td>
<td>In addition to engaging students in examining similarities and differences, how can you monitor the extent to which the students are deepening their knowledge?</td>
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5. Examining Errors in Reasoning

When content is informational, the teacher helps students deepen their knowledge by examining their own reasoning or the logic of the information as presented to them.

Teacher Evidence
- Teacher asks students to examine information for errors or informal fallacies
  - Faulty logic
  - Attacks
  - Weak reference
  - Misinformation
- Teacher asks students to examine the strength of support presented for a claim
  - Statement of a clear claim
  - Evidence for the claim presented
  - Qualifiers presented showing exceptions to the claim

Student Evidence
- When asked, students can describe errors or informal fallacies in information
- When asked, students can explain the overall structure of an argument presented to support a claim
- Student artifacts indicate that they can identify errors in reasoning.

Scale Levels: (choose one)
- Innovating
- Applying
- Developing
- Beginning
- Not Using
- Not Applicable

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6. Practicing Skills, Strategies, and Processes

When the content involves a skill, strategy, or process, the teacher engages students in practice activities that help them develop fluency.

Teacher Evidence

- Teacher engages students in massed and distributed practice activities that are appropriate to their current ability to execute a skill, strategy, or process
  - Guided practice if students cannot perform the skill, strategy, or process independently
  - Independent practice if students can perform the skill, strategy, or process independently

Student Evidence

- Students perform the skill, strategy, or process with increased confidence
- Students perform the skill, strategy, or process with increased competence

Scale Levels: *(choose one)*

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Practicing skills, strategies, and processes

Adapts and creates new strategies for unique student needs and situations.

When content involves a skill, strategy, or process, engages students in practice activities and monitors the extent to which the practice is increasing student fluency.

Uses strategy incorrectly or with parts missing.

Strategy was called for but not exhibited.

Reflection Questions

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Practicing skills, strategies, and processes

What are you learning about your students as you adapt and create new strategies?

How might you adapt and create practice activities that increase fluency and address unique student needs and situations?

In addition to engaging students in practice activities, how can you monitor the extent to which the practice is increasing student fluency?

How can you engage students in practice activities when content involves a skill, strategy, or process?

How can you begin to incorporate some aspect of this strategy in your instruction?
7. **Revising Knowledge**

The teacher engages students in revision of previous knowledge about content addressed in previous lessons.

**Teacher Evidence**
- Teacher asks students to examine previous entries in their academic notebooks or notes
- The teacher engages the whole class in an examination of how the current lesson changed perceptions and understandings of previous content
- Teacher has students explain how their understanding has changed

**Student Evidence**
- Students make corrections to information previously recorded about content
- When asked, students can explain previous errors or misconceptions they had about content

**Scale Levels: (choose one)**
- Innovating
- Applying
- Developing
- Beginning
- Not Using
- Not Applicable

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<td>Adapts and creates new strategies for unique student needs and situations.</td>
<td>Engages students in revision of previous content and monitors the extent to which these revisions deepen students’ understanding.</td>
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<td>What are you learning about your students as you adapt and create new strategies?</td>
<td>How might you adapt and create new strategies for revising content that address unique student needs and situations?</td>
<td>In addition to engaging students in revision of previous content, how can you monitor the extent to which these revisions deepen students’ understanding?</td>
<td>How can you engage students in the revision of previous content?</td>
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8. **Student Interviews**

**Student Questions:**
- How did this lesson add to your understanding of the content?
- What changes did you make in your understanding of the content as a result of the lesson?
- What do you still need to understand better?
Design Question #4: What will I do to help students generate and test hypotheses about new knowledge?

1. **Organizing Students for Cognitively Complex Tasks**

   The teacher organizes the class in such a way as to facilitate students working on complex tasks that require them to generate and test hypotheses.

   **Teacher Evidence**
   - ☐ Teacher establishes the need to generate and test hypotheses
   - ☐ Teacher organizes students into groups to generate and test hypotheses

   **Student Evidence**
   - ☐ When asked, students describe the importance of generating and testing hypotheses about content
   - ☐ When asked, students explain how groups support their learning
   - ☐ Students use group activities to help them generate and test hypotheses

   **Scale Levels:** (choose one)
   - ☐ Innovating
   - ☐ Applying
   - ☐ Developing
   - ☐ Beginning
   - ☐ Not Using
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<td>Organizes students into groups to facilitate working on cognitively complex tasks and monitors the extent to which group processes facilitate generating and testing hypotheses.</td>
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<td>How might you adapt and create new strategies for organizing students to complete cognitively complex tasks?</td>
<td>In addition to organizing students in groups for cognitively complex tasks, how can you monitor the extent to which group processes facilitate generating and testing hypotheses?</td>
<td>How can you organize students in groups to facilitate working on cognitively complex tasks?</td>
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2. Engaging Students in Cognitively Complex Tasks Involving Hypothesis Generation and Testing

The teacher engages students in complex tasks (e.g. decision making, problem solving, experimental inquiry, investigation) that require them to generate and test hypotheses.

**Teacher Evidence**
- Teacher engages students with an explicit decision making, problem solving, experimental inquiry, or investigation task that requires them to generate and test hypotheses
- Teacher facilitates students generating their own individual or group task that requires them to generate and test hypotheses

**Student Evidence**
- Students are clearly working on tasks that require them to generate and test hypotheses
- When asked, students can explain the hypothesis they are testing
- When asked, students can explain whether their hypothesis was confirmed or disconfirmed
- Student artifacts indicate that they can engage in decision making, problem solving, experimental inquiry, or investigation

**Scale Levels:**
- Innovating
- Applying
- Developing
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3. Providing Resources and Guidance

The teacher acts as resource provider and guide as students engage in cognitively complex tasks

Teacher Evidence
- Teacher makes himself/herself available to students who need guidance or resources
  - Circulates around the room
  - Provides easy access to himself/herself
- Teacher interacts with students during the class to determine their needs for hypothesis generation and testing tasks
- Teacher volunteers resources and guidance as needed by the entire class, groups of students, or individual students

Student Evidence
- Students seek out the teacher for advice and guidance regarding hypothesis generation and testing tasks
- When asked, students can explain how the teacher provides assistance and guidance in hypothesis generation and testing tasks

Scale Levels: (choose one)
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<td>Acts as a guide and resource provider as students engage in cognitively complex tasks and monitors the extent to which students request and use guidance and resources.</td>
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4. Student Interviews

Student Questions:
- How did this lesson help you apply or use what you have learned?
- What change has this lesson made about your understanding of the content?