

Dimension 2 – Acquire & Integrate Knowledge

Segment 2: Lesson Segments Addressing Content

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

Element: 10 – How can I use technology for Processing New Information [use this in conjunction with element 9]

AITSL STANDARDS: Standard 1 - Know students and how they learn; Standard 2 – Know the content and how to teach it; Standard 3 – Plan for and implement effective teaching and learning; Standard 5 – Assess, provide feedback and report on student learning

Descriptor: During breaks in the presentation of content, the teacher engages students in actively processing new information. Students can explain what they have just learned, ask clarifying questions, and/or actively discuss the content.

		Sample Activities		
Score 4.0	<p>In addition to Score 3.0, in-depth inferences and applications that go beyond what was practiced.</p> <p>How am I doing?</p> <p>4 - Innovating - I adapt and create new strategies (differentiate) for unique student needs and situations, in order for the desired effect to be evident in all students.</p>	<p>Innovating Tip: CHECK</p> <p>Adapt free online polling tools such as Kahoot, Poll Everywhere, Socrative, TodaysMeet, or Padlet to create Exit cards: <i>Pre-assessment cards</i>, <i>exit slips</i> ♣ <i>Note to a Friend</i> ♣ <i>Ticket to Enter or Leave</i> ♣ 3 Finger self-assessment (3 = fully understand, 2 = understand somewhat, 1 = don't understand).</p>		
	<p>3.5 In addition to score 3.0 performance, in-depth inferences and applications with partial success.</p>			
Score 3.0	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%; padding: 5px;"> <p>Teacher Evidence</p> <ul style="list-style-type: none"> <input type="checkbox"/> Teacher has group members summarize new information <input type="checkbox"/> Teacher employs formal group processing strategies • Jigsaw • Reciprocal Teaching • Concept attainment • Perspective Analysis; • Thinking Hats; or • Collaborative Processing </td> <td style="width: 33%; padding: 5px;"> <p>Student Evidence</p> <ul style="list-style-type: none"> <input type="checkbox"/> When asked, students can explain what they have just learned <input type="checkbox"/> Students volunteer predictions <input type="checkbox"/> Students voluntarily ask clarification questions <input type="checkbox"/> 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 </td> </tr> </table> <p>How am I doing?</p> <p>3 - Applying – I break input experiences into small chunks based on student needs and monitor for evidence of the extent to which chunks are appropriate for the majority of the students.</p>	<p>Teacher Evidence</p> <ul style="list-style-type: none"> <input type="checkbox"/> Teacher has group members summarize new information <input type="checkbox"/> Teacher employs formal group processing strategies • Jigsaw • Reciprocal Teaching • Concept attainment • Perspective Analysis; • Thinking Hats; or • Collaborative Processing 	<p>Student Evidence</p> <ul style="list-style-type: none"> <input type="checkbox"/> When asked, students can explain what they have just learned <input type="checkbox"/> Students volunteer predictions <input type="checkbox"/> Students voluntarily ask clarification questions <input type="checkbox"/> 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 	<p>Emerging Tip: CHEW</p> <p>TOP 10 CHEWING ACTIVITIES</p> <ul style="list-style-type: none"> o Ways to collaborate to CHEW o Ways to Move to CHEW - <i>Classification Cruz</i> ☑ <i>Walk and Talk</i> ☑ <i>Total Physical Response</i> ☑ Charades ☑ <i>Moving Math</i> o Ways to Talk to CHEW - <i>Act it out</i> ☑ <i>Think / Pair / Share</i> o Ways to Write to CHEW ☑ <i>Learning Logs / Journals</i> ☑ <i>Note-Taking Strategies</i> ☑ <i>TV Guide Summaries</i> ☑ <i>blog</i> ☑ <i>Wiki</i> o Ways to Draw / Design to CHEW - <i>Comic Strips</i> ☑ <i>Vocabulary Pictures</i> ☑ <i>Graphic Organisers</i> ☑ <i>Doodle Notes</i> ☑ <i>Mind mapping</i> <p>There are a whole range of strategies you can use to group students together. Many of these work best face-to-face (such as <i>Inside-Outside Circle</i> or the <i>Three-Step Interview</i>) and then students can record their reflections in a blog which can be shared further. A good way to blend is to use a Placemat strategy and either record the centre of the placemat in a blog or scan in the whole placemat. You may like to conduct some of these strategies online using discussion board. For example, <i>Four Corners</i> lends itself well to a discussion board; just use 4 threads: strongly agree, agree, disagree, and strongly disagree). <i>Think-Pair-Share</i> is another strategy that could be adapted to a discussion board. The <i>Jigsaw</i> strategy could easily be adapted in a Wiki or blog, with each expert group recording their expertise.</p> <p>You will need to use your guides for interacting in a blended classroom. Online, these will be related to giving constructive feedback, <i>eDiscussion rules</i> , <i>Netiquette</i> and <i>Digital Citizenship</i>. Offline, guides to collaborative learning are recommended.</p>
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	<p>2.5 No major errors or omissions regarding 2.0 content and partial knowledge of the 3.0 content.</p>			
Score 2.0	<p>There are no major errors or omissions regarding the simpler details and processes.</p> <p>How am I doing?</p> <p>2 - Developing – I break input experiences into small chunks based on student needs, but the majority of students are not monitored for the desired effect of the strategy.</p> <p>However, the teacher exhibits major errors or omissions regarding the more complex ideas and processes.</p>	<p>Beginning Tips: CHUNK</p> <p>⇒ Virtual Classrooms are a great place to sequence activity CHUNKS, to form a learning pathway.</p> <ul style="list-style-type: none"> o VISUAL: show a movie or clip from a movie; demonstrate from a chart or graph; blog; Wikipedia; Webquest; Powerpoint; read a book or article; show pictures; use graphic organisers or conceptual organisers; watch a demonstration; use new technology; read in various structures (small groups, read aloud, paired reading, reading centres, jigsaw, etc). o AUDITORY: say it; have them say it to each other; play a song; listen to a speech or a speaker; talk to each other; listen to music; podcasts; books on tape; discussions with others. o KINAESTHETIC: role play, demonstrate, have students try something; rotate through stations; set them up to teach content; move, touch, build, draw, take apart; play charades; create group tableau; conduct lab experiments. o SOCIAL: talk about it; listen or tell others; brainstorming; sharing experiences; predicting / hypothesizing, do a role-play; play a game; online class discussion. 		
	<p>1.5 Partial knowledge of the 2.0 content, but major errors or omissions regarding the 3.0 content.</p>			
Score 1.0	<p>With help, a partial understanding of some of the simpler details and processes and some of the more complex ideas and processes.</p>			
	<p>0.5 With help, a partial understanding of the 2.0 content, but not the 3.0 content.</p>			
Score 0.0	<p>Even with help, no understanding or skill demonstrated.</p>			

S A M R

Elaboration

Desired Effect: During breaks in the presentation of content, the teacher engages students in actively processing new information. Students can explain what they have just learned, ask clarifying questions, and/or actively discuss the content.

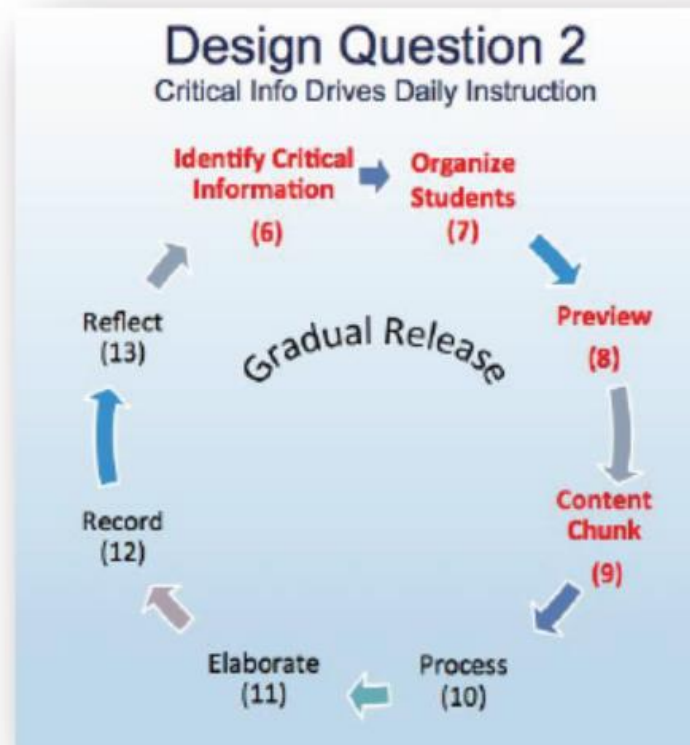
What Can I do to Help Students Process New Information?

- ✓ Explicitly teach students the steps for each processing activity before asking them to engage in it.
- ✓ Post a chart with the steps for processing strategies (such as jigsaw or reciprocal teaching) where students can refer to it.
- ✓ Post a list of specific clarifying questions that students can ask during small-group discussions.

Why Group Processing?

After each small chunk of information is provided, students should work in small groups to describe, discuss, and make predictions regarding new information. Group processing focused on students generating conclusions about the new information adds rigor to the learning.

Element 10 is the point in lesson delivery where the teacher gradually releases the learning responsibility to the students.



Group Processing Strategies

This strategy asks students to induce an awareness and understanding of a new concept by responding to examples and non-examples of that concept. All examples should clearly reflect the essential characteristics or attributes associated with the concept. The non-examples should clearly demonstrate the absence of those attributes. Students compare and contrast the examples looking for patterns and making predictions about what the concept is.

Perspective Analysis

This activity requires students to consider multiple perspectives on new knowledge through a five-step strategy utilizing specific questions:

1. Identify your position – *What do I believe about this?*
2. Determine your reasoning – *Why do I believe that?*
3. Identify another person – *What is another way of looking at this?*
4. Describe possible reasoning for the new opposing position – *Why might someone else hold a different position?*
5. Summarize what you have learned – *What have I learned?*

Teacher Evidence	Student Evidence
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See over for Proficiency Scales

Remember, to be proficient on Marzano's Teaching Scales for Reflective practice at level 3 you need to use the strategy, exhibit some of the evidence above **AND** monitor the extent to which it affects student outcomes. Then to achieve a 4 (innovating) you need to adapt and create a new version of the strategy that differentiates for unique student needs and situations.

Scale

	0 Not Using	1 Beginning	2 Developing	3 Applying	4 Innovating
Processing new information	Strategy was called for but not exhibited.	Uses strategy incorrectly or with parts missing.	Engages students in summarizing, predicting, and Questioning activities, but the majority of students are not monitored for the desired effect of the strategy.	Engages students in summarizing, predicting, and questioning activities and monitors for evidence of the extent to which the activities enhance the majority of students' understanding.	Adapts and creates new strategies for unique student needs and situations in order for the desired effect to be evident in all students.

Reflection Questions

	0 Not Using	1 Beginning	2 Developing	3 Applying	4 Innovating
Processing new information	How can you begin to incorporate some aspects of this strategy into your instruction?	How can you engage students in summarizing, predicting, and questioning activities?	In addition to engaging students in summarizing, predicting, and questioning activities, how can you monitor the extent to which the activities enhance students' understanding?	How might you adapt and create new strategies for processing new information that address unique student needs and situations?	What are you learning about your students as you adapt and create new strategies?