Research Based Strategies that Help Teachers to Get the Most Growth in their Classroom

DESIRED EFFECTS OF THE FOLLOWING ELEMENTS

Helping Students to Be Successful	Instruction	Conditions to help Students Learn
Learning Goals & Performance Scales	Chunking	Communicating High Expectations
	Previewing New Content	How to Establish and Maintain Effective Relationships
Tracking Student Progress	Grouping Students for Learning	Establishing Rules & Procedures
	Previewing new content	How to Get students to follow rules
Celebrating Student Growth	Taking notes and represent knowledge	Engagement Strategies
	Helping Students Process new content	
	Questioning Techniques	Monitoring for Learning
	Examining Similarities and Differences	
	Identifying Critical Content	
	Helping students to provide evidence for their inferences	
	Helping students practice skills, strategies and processes	Instruction (cont)
	Helping students examine their reasoning	Using Homework
	Helping students revise knowledge	Engaging students in Cognitively Complex Tasks Involving Hypothesis

Design Question 3

	Element	Focus Statement	Desired Effect
What will I do to help students practice and deepen their understanding of new knowledge?	**14. Reviewing Content**	The teacher engages students in a brief review of content that highlights the cumulative nature of the content.	Students produce an accurate representation of previously taught critical content.
	15. Organizing Students to Practice and Deepen Knowledge	The teacher organizes and guides grouping in ways that appropriately facilitate practicing and deepening knowledge.	Students practice and deepen knowledge by interacting in small groups.
	16. Using Homework	The teacher designs homework activities that allow students to access and analyze content to deepen knowledge or practice a skill, strategy, or process.	Students' understanding of content and/or practice of skills, strategies, or processes is deepened with appropriate homework.
	17. Helping Students Examine Similarities and Differences	When presenting content, the teacher helps students deepen their knowledge by examining similarities and differences.	Students describe how elements are similar and different and what new information they have learned as a result of their comparisons.
	18. Helping Students Examine Their Reasoning	The teacher helps students produce and defend claims by examining their own reasoning or the logic of presented information, processes, and procedures.	Students can identify and articulate errors in logic or reasoning, or the structure of an argument, and explain new insights resulting from this analysis.
	19. Helping Students Practice 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 and alternative ways of executing procedures.	Students develop automaticity with skills, strategies, or processes by engaging in appropriate practice activities.
	20. Helping Students Revise Knowledge	The teacher engages students in revision of previous knowledge by correcting errors and misconceptions as well as adding new information.	Students make additions and deletions to previous knowledge that deepen their understanding.

Design Question 4

	Element	Focus Statement	Desired Effect
What will I do to help students generate and test hypotheses about new knowledge?	**21. Organizing Students for Cognitively Complex Tasks**	The teacher appropriately organizes and guides groups to work on short- and long-term complex tasks that require them to generate and test hypotheses.	Students interact in small groups for the purpose of generating and testing hypotheses to enhance understanding of content.
	22. Engaging Students in Cognitively Complex Tasks Involving Hypothesis Generation and Testing	The teacher engages students in short- and long-term complex tasks that require them to generate and test hypotheses and analyze their own thinking.	Students generate and test hypotheses to enhance their understanding of content and the inquiry process.
	23. Providing Resources and Guidance for Cognitively Complex Tasks	The teacher acts as resource provider and guide as students engage in short- and long-term complex tasks.	Students have adequate resources and guidance to complete the hypothesis generation and testing task.

Marzano Observation & Evaluation System

Design Question Reference Sheet (DQ 2, DQ 3, DQ 4)

Professional DEVELOPMENT

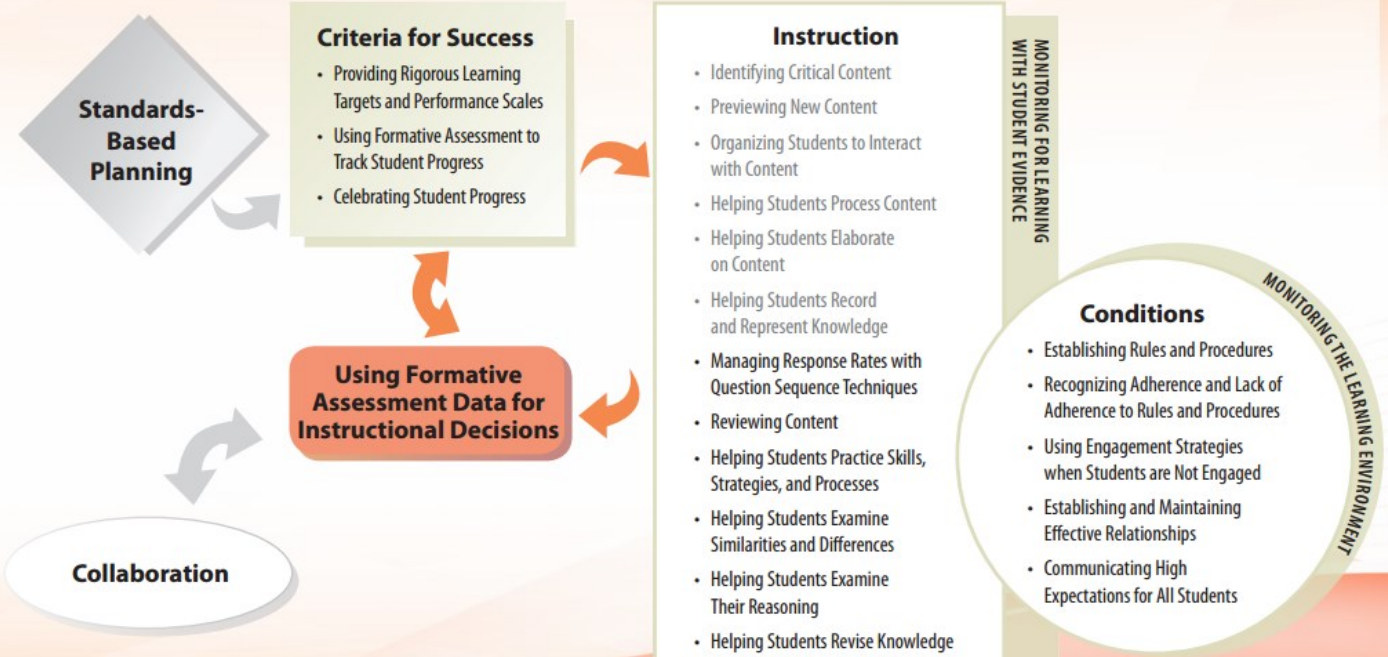
Design Question 2

What will I do to help students effectively interact with new knowledge?

Element	Focus Statement	Desired Effect
6. Identifying Critical Content	The teacher continuously identifies accurate critical content during a lesson or part of a lesson that portrays a clear progression of information that leads to deeper understanding of the content.	Students know what content is important and what is not important.
7. Organizing Students to Interact with New Content	The teacher organizes students into appropriate groups to facilitate the processing of new content.	Students interact in small groups to process and understand new knowledge.
8. Previewing New Content	The teacher engages students in previewing activities that require students to access prior knowledge and analyze new content.	Students make a link from what they know to what is about to be learned: activating prior knowledge.
9. Chunking Content into "Digestible Bites"	Based on student evidence, the teacher breaks the content into small chunks (i.e., digestible bites) of information that can be easily processed by students to generate a clear conclusion.	Students process and learn information in appropriate chunks.
10. Helping Students Process New Content	The teacher systematically engages student groups in processing and generating conclusions about new content.	Students are cognitively engaged with new content during interactions with other students.
11. Helping Students Elaborate on New Content	The teacher asks questions that require inferences about the new content but also requires students to provide evidence for their inferences.	Students draw conclusions that were not explicitly taught within the chunk.
12. Helping Students Record and Represent Knowledge	The teacher engages students in activities that require recording and representing knowledge emphasizing creation of a variety of types of models that organize and summarize the important content.	Students accurately record and represent their understanding of critical content in linguistic and/or nonlinguistic ways.
13. Helping Students Reflect on Learning	The teacher engages students in activities that help them reflect on their learning and the learning process.	Students examine their level of understanding and identify areas where they are clear and confused.

STANDARDS-BASED CLASSROOM
Teaching Map

MARZANO CENTER
ESSENTIALS FOR ACHIEVING RIGOR



LearningSciencesInternational
LEARNING AND PERFORMANCE MANAGEMENT

1.877.411.7114
MarzanoCenter.com

new information they have learned as a result of their comparisons.

18. Helping Students Examine Their Reasoning: Students can identify and articulate errors in logic or reasoning, or the structure of an argument, and explain new insights resulting from this analysis.

20. Helping Students Revise Knowledge: Students make additions and deletions to previous knowledge that deepen their understanding.

22. Engaging Students in Cognitively Complex Tasks Involving Hypothesis Generation and Testing: Students generate and test hypotheses to enhance their understanding of content and the inquiry process.