

Solution Tree | Press

The Handbook for the New Art and Science of Teaching

By Robert J. Marzano

Study Guide

This study guide is a companion to the book *The Handbook for the New Art and Science of Teaching* by Robert J. Marzano. *The Handbook for the New Art and Science of Teaching*, a guide for the updated framework introduced in *The New Art and Science of Teaching*, details the elements of three overarching categories of teaching and offers over 330 instructional strategies.

This guide is arranged by chapter, enabling readers to either work their way through the entire book or focus on the specific topics addressed in a particular chapter. It can be used by individuals, small groups, or an entire team to identify key points, raise questions for consideration, assess conditions in a particular school or district, and suggest steps that might be taken to promote a healthy school culture.

We thank you for your interest in this book, and we hope this guide is a useful tool in your efforts to create a healthy culture in your school or district.

Copyright © 2019 by Solution Tree Press

Chapter 1

Providing and Communicating Clear Learning Goals

1. What are *learning goals*? How can teachers clearly articulate the learning goals for each assignment?
2. How can routines benefit the classroom? Describe some ways you might develop a routine to include learning targets and scales.
3. What are the three different types of assessments? When is the best time and place to utilize each of the assessment categories? Is one form more powerful than the other types?
4. What are some student responses and behaviors teachers can monitor to determine whether element 2, *tracking student progress*, is being implemented correctly? How can teachers monitor their own use of the element?
5. What are the three strategies within element 3, *celebrating success*? Describe and give examples of each.

6. Reflect on the types of strategies you use when celebrating success in your classroom.

Which level of the teacher proficiency scale shown in figure 1.10 (page 21) mirrors the level of your current celebratory behaviors and growth-minded feedback?

Chapter 2

Using Assessments

1. What information do students gain from assessments? What information do assessments provide to teachers?
2. What is the purpose of utilizing whole-class informal assessments? What are some techniques teachers can implement to receive immediate feedback from their students?
3. What are the steps teachers take when using the informal assessment strategy, response boards? To check for student understanding, what are some things teachers should look for?
4. What is the purpose of using formal assessments in the classroom? How can teachers and students use assessment data to determine if learning targets are met?
5. Describe a scenario where you might incorporate student demonstrations in your classroom. What are some questions you could ask during or after the demonstration?

6. What are some tips teachers can utilize while interviewing students? Can you think of any additional tips for student interviews? Are there tips you can give students before an interview?

Chapter 3

Conducting Direct Instruction Lessons

1. What is *chunking*? Why should teachers present information in small sets, and what is a strategy teachers can use to allow for processing content between chunks?
2. How do the element 7 strategies, perspective analysis and thinking hats, engage students in actively processing new information? Think of a topic that students can examine while wearing thinking hats or following the five steps of perspective analysis.
3. Describe the actions students take before and after breaking off into groups when implementing the scripted cooperative dyads strategy. What are some skills teachers should review with students in preparation for this strategy?
4. List some ways you have your students record and process new content in linguistic and nonlinguistic fashions. Are there opportunities to combine or add different strategies to your existing activities?
5. What are the similarities and differences between graphic organizers and free-flowing webs? What are some common graphic organizer structures, and how can students possibly use a free-flowing web?

6. Consider the dramatic enactments played out in your classroom. Have they been effective in deepening students' understanding of the content? How might you improve the enactments so that students are engaging with the content and learning from their own as well as from their classmates' performances?

Chapter 4

Conducting Practicing and Deepening Lessons

1. Why should teachers first model any skill, strategy, or process to students? What does your modeling process look like? Do you use any of the modeling techniques listed in the chapter?
2. Describe *frequent structure practice*, *varied practice*, and *fluency practice*. When does a teacher know when to move a student from one type of practice to the next?
3. Consider the ways you have your students examine similarities and differences. Are you using some of the fourteen strategies within element 10? Which new strategies would help deepen students' knowledge in your classroom?
4. List some examples of sorting, matching, and categorizing activities. How might you adapt these activities so that students could complete them individually, in groups, and as a class?
5. What are the four types of errors in thinking? Describe and give examples of each type.

6. Define *habits of mind*. How can productive habits of mind help us complete complex tasks?

Chapter 5

Conducting Knowledge Application Lessons

1. Define *knowledge application lessons*. What are the students' roles in these types of lessons, and how do teachers facilitate knowledge application tasks?
2. What is the seven-step process for invention tasks? What behaviors and skills do students exhibit when completing these types of activities?
3. Consider the resources you provide to students to guide them in completing cognitively complex tasks. What is the purpose of allowing students to select resources from numerous relevant options? What are some tips you can use when providing resources?
4. In what ways can teachers help students develop their research abilities?
5. In your own words, define *claims*. At the primary level, how can teachers help students generate claims and support? At the formal level, what should students include to support their claims?

6. Describe a classroom situation in which you could incorporate an opportunity for students to create and defend claims formally. How might you use a cognitively complex task to accomplish this?

Chapter 6

Using Strategies That Appear in All Types of Lessons

1. What is the benefit of introducing new content at the very beginning of a class? What are some informational hooks and bell-ringer activities that you can use to preview new content?
2. Why is using explicit instruction one of the most essential means of conveying critical content? What are the explicit instruction guidelines?
3. Why is cumulative review the most powerful strategy for reviewing content? List the four-step process for this review form.
4. What are some ways teachers can have students engage in a revision of previous knowledge about content they addressed in past lessons by using academic notebooks?
5. Describe the two kinds of general inferential questions. What must a teacher identify in order to stimulate reasoned inferences?
6. In your own words, define *norms*. Why must students create a set of norms to govern their student groups? How might the teacher facilitate the creation of group norms?

Chapter 7

Using Engagement Strategies

1. How might a teacher ask students to self-report their engagement levels throughout a class or unit? In what ways do you use student-engagement measurement tools?
2. How does physical movement relate to student engagement? How might you manipulate your classroom to include activities with physical movement?
3. “The teacher speeds up or slows down the pace of the lesson to meet the engagement needs of students” (page 191). What are some ways teachers can speed up the pace of instruction, and how can the pace be slowed down?
4. Consider a unit you teach. What are some direct statements you can make about the importance of the content? What are some explicit connections you can draw between the content and the real world and between the content and students’ interests?
5. How might presenting unusual information to students stimulate their intrigue? What are *webquests*? List the six components of webquests.

6. Why might a teacher use friendly controversy techniques to engage students? What are some guidelines teachers can provide students for using friendly controversy?

7. Why should teachers provide students with opportunities to talk about themselves? What strategies do you use at the beginning of the school year to get to know your students?

8. In your own words, define *mindfulness practices*. What are some mindfulness activities that you have used to inspire and motivate students? Which of table 7.2's activities for mindfulness would best fit into your classroom?

Chapter 8

Implementing Rules and Procedures

1. Define *rules* and *procedures*. When should teachers establish rules and procedures in the classroom? What are some examples of rules and procedures in your classroom?
2. What are the advantages to placing the teacher's desk in the front of the room? What are the advantages to placing the teacher's desk in the back of the room? Consider the placement of your desk. Is it in an accessible location?
3. What is *withitness*? How does a teacher occupy the whole classroom both physically and visually? What effect do these actions have on students' behaviors?
4. Why should teachers acknowledge students when they follow rules and behaviors? What are some ways you verbally and nonverbally affirm students' positive behaviors?
5. Why is using a pregnant pause a powerful motivator for a student to adjust his or her lack of adherence to rules and procedures? List the four steps for using a pregnant pause.

6. Why is the overcorrection strategy successful in quelling inappropriate behaviors?

Examine table 8.5 (page 268) and create a different scenario of a student's inappropriate behavior and its corresponding overcorrection consequence.

Chapter 9

Building Relationships

1. What student mental state is conducive to learning? How can teachers help create this mental state?
2. How do informal conferences with students differ from formal conferences? When might a teacher hold an informal conference, and what are some topics a teacher can bring up?
3. What steps do you take prior to parent-teacher conferences? During parent-teacher conferences, what are some steps you take to find out information about students' backgrounds and to build relationships with parents?
4. Why should teachers make time for self-reflection and self-monitoring? What do the processes for these strategies look like, and what are some questions teachers can ask themselves while self-reflecting and self-monitoring?
5. What are the three categories a teacher can fall under when interacting with students and leading a classroom? List some characteristics of each teaching style. Is one behavior more impactful and beneficial than the others? Why is this?

6. What are the five types of students that may challenge a teacher's ability to remain objective and in control? Describe a case in which you interacted with a student with unique needs in a negative way and how one of the considerations in table 9.2 (page 307) could have helped you remain thoughtful and in control.

Chapter 10

Communicating High Expectations

1. Why should teachers communicate high expectations for all students? What are some of the negative behaviors teachers exhibit if they do not demonstrate value and respect for low-expectancy students?
2. What is the ultimate goal of demonstrating value and respect for reluctant learners? Have you caught yourself treating reluctant learners differently? What are some nonverbal and verbal indicators you can use to communicate respect and value to these students?
3. Why are questioning sequences a more reliable method for eliciting higher-order thinking from students than individual questions? Describe the four phases of questioning sequences.
4. Why should teachers avoid having inappropriate negative reactions to student responses? Consider a case in which you had an inappropriate reaction to a student's response. What could you say or do in the future to avoid this negative response?
5. How should teachers respond to incorrect or incomplete answers from reluctant learners? How does your process compare to the three steps of the appropriate response process?