# COMMUNICATING HIGH EXPECTATIONS

# Probing Incorrect Answers with Reluctant Learners

THE MARZANO COMPENDIUM OF INSTRUCTIONAL STRATEGIES

#### Probing Incorrect Answers with Reluctant Learners



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## INTRODUCTION

In 2007, Dr. Robert J. Marzano published *The Art and Science of Teaching: A Comprehensive Framework for Effective Instruction*. The framework, composed of three lesson segments, ten design questions, and forty-one elements, was based on research showing that teacher quality is one of the strongest influences on student achievement—that is, an effective teacher can positively and significantly impact student learning. As such, *The Art and Science of Teaching* sought to identify specific action steps teachers could take to improve their effectiveness.

In 2015, Dr. Marzano updated *The Art and Science of Teaching* framework to reflect new insights and feedback. The Marzano Compendium of Instructional Strategies is based on this updated model, presenting forty-three elements of effective teaching in ten categories. Each folio in the series addresses one element and includes strategies, examples, and reproducible resources. The Compendium and its folios are designed to help teachers increase their effectiveness by focusing on professional growth. To that end, each folio includes a scoring scale teachers can use to determine their proficiency with the element, as well as numerous strategies that teachers can use to enact the element in their classrooms. Indeed, the bulk of each folio consists of these strategies and reproducibles for implementing and monitoring them, making the Compendium a practical, actionable resource for teachers, instructional coaches, teacher mentors, and administrators.

# PROBING INCORRECT ANSWERS WITH RELUCTANT LEARNERS

To enact this element, teachers must probe incorrect answers with reluctant learners in the same manner as they does with high-expectancy students. Research has shown that teachers are typically more willing to probe an incorrect answer—to ask questions that help a student identify his or her own errors and discover the right answer—with high-expectancy students than with students for whom they have lower expectations. Teachers also give reluctant learners less feedback about their answers and spend less time trying to uncover the logic and structure of reluctant learners' answers to questions. This element seeks to make teachers aware of these discrepancies in order to combat them in their own teaching.

#### **Monitoring This Element**

There are specific student responses that indicate this element is being effectively implemented. Before trying strategies for the element in the classroom, it is important that the teacher knows how to identify the types of student behaviors that indicate the strategy is producing the desired effects. General behaviors a teacher might look for include the following.

- When asked, students say that the teacher won't "let you off the hook."
- When asked, students say that the teacher "won't give up on you."
- When asked, students say the teacher helps them answer questions successfully.

Desired behaviors such as these are listed for each strategy in this element.

Teachers often wonder how their mastery of specific strategies relates to their mastery of the element as a whole. Successful execution of an element does not depend on the use of every strategy within that element. Rather, multiple strategies are presented within each element to provide teachers with diverse options. Each strategy can be an effective means of implementing the goals of the element. If teachers attain success using a particular strategy, it is not always necessary to master the rest of the strategies within the same element. If a particular strategy proves difficult or ineffective, however, teachers are encouraged to experiment with various strategies to find the method that works best for them.

#### **Scoring Scale**

The following scoring scale can help teachers assess and monitor their progress with this element. The scale has five levels, from Not Using (0) to Innovating (4). A teacher at the Not Using (0) level is unaware of the strategies and behaviors associated with the element or is simply not using any of the strategies. At the Beginning (1) level, a teacher attempts to address the element by trying specific strategies, but does so in an incomplete or incorrect way. When a teacher reaches the Developing (2) level, he or she implements strategies for the element correctly and completely, but does not monitor their effects. At the Applying (3) level, a teacher implements strategies for the element and monitors their effectiveness with his or her students. Finally, a teacher at the Innovating (4) level is fluent with strategies for the element and can adapt them to unique student needs and situations, creating new strategies for the element as necessary.

Scale for Probing Incorrect Answers with Reluctant Learners

4	3	2	1	0
Innovating	Applying	Developing	Beginning	Not Using
I adapt behaviors and create new strategies for unique student needs and situations.	I probe incor- rect answers with reluctant learners in the same manner as with high-ex- pectancy students, and I monitor the level and quality of responses of reluc- tant learners.	I probe incorrect answers with reluc- tant learners in the same manner as with high-expec- tancy students, but I do not monitor the effect on students.	I use the strategies and behaviors asso- ciated with this ele- ment incorrectly or with parts missing.	I am unaware of strategies and behaviors associated with this element.

The following examples describe what each level of the scale might look like in the classroom.

Not Using (0): A teacher simply calls on a different student if someone in his class gives an incorrect answer.

**Beginning (1):** A teacher gives reluctant learners an opportunity to try again if they give an incorrect answer, but she doesn't provide scaffolding or leading questions to help in the process.

**Developing (2):** A teacher helps reluctant learners revise incorrect answers by asking questions that help them identify and re-examine their errors. However, he does nothing to determine if this strategy is having a lasting impact on his reluctant learners.

Applying (3): A teacher probes incorrect answers to help reluctant learners self-correct their errors. He informally monitors how his reluctant learners respond when he asks them challenging questions. Over time, he notices that students seem more comfortable attempting to answer questions they are unsure about as well as working through the probing questions to correct their errors.

Innovating (4): A teacher helps reluctant learners find the correct answer to a question when they initially present an incorrect answer, and she monitors the effect this has on students. While most students are successful in response to these strategies, one student continues to be particularly uncomfortable with responding to probing questions in front of the rest of the class. To support this student, the teacher creates a worksheet with a set of general probing questions. When she would normally ask probing questions verbally, she gives the student the worksheet and lets her off the hook temporarily to think about the questions on her own.

## **STRATEGIES**

Each of the following strategies describes specific actions that teachers can take to enact this element in their classrooms. Strategies can be used individually or in combination with each other. Each strategy includes a description, a list of teacher actions, a list of desired student responses, and suggestions for adapting the strategy to provide extra support or extensions. Extra support and extensions relate directly to the Innovating (4) level of the scale. Extra support involves steps teachers can take to ensure they are implementing the strategy effectively for all students, including English learners, special education students, students from low socioeconomic backgrounds, and reluctant learners. Extensions are ways that teachers can adapt the strategy for advanced students. In addition, some strategies include technology tips that detail ways teachers can use classroom technology to implement or enhance the strategy. Finally, each strategy includes further information, practical examples, or a reproducible designed to aid teachers' implementation of the strategy.

#### **Using an Appropriate Response Process**

The teacher responds appropriately to incorrect or incomplete responses from reluctant learners by first demonstrating gratitude for the student's response. Next, the teacher points out what is correct and what is incorrect about the student's response. Whenever possible, the teacher should emphasize what was correct and acknowledge that the student was headed in the right direction. If the student's response was completely incorrect, the teacher identifies the question that the incorrect response would have answered. Finally, the teacher helps the student answer correctly or complete his or her previous answer by giving the student more time to think, using hints or cues, modifying or restating the original question, or finding a simpler question within the one initially asked. The teacher might also provide the answer to the student and ask the student to elaborate on it, restate it in his or her own words, or provide an example of the answer.

#### **Teacher Actions**

- Thanking each student for his or her response
- Identifying correct and incorrect portions of students' responses
- Emphasizing correct portions of answers and identifying the question that an incorrect portion would have answered
- Helping students answer questions correctly

#### **Desired Student Responses**

- Describing the teacher as someone who appreciates students' responses
- Explaining which parts of their answers were correct and incorrect

#### **Extra Support**

• Posting a list of the types of help students can access if they don't know the answer to a question

#### **Extension**

 Helping students design an appropriate response process to use when students ask and answer questions during small-group work

# **Responding to Incorrect Student Answers**

1.	Ex	press appreciation for the student's response.	
	•	"Thank you for that answer!"	
	•	"I appreciate your willingness to share."	
	•	"Thank you for bringing up those ideas."	
2.	lde	entify the correct and incorrect parts of the ansv	ver.
	•	"When you said [correct por exactly right. However, I want to talk more abo [incorrect portion]."	
	•	"You were headed in the right direction with _ portion], but you took a bit of a detour with _ portion]. Let's see if we can get back on track."	[incorrect
	•	"Actually, your response about have answered a different question, such as response would have answered]."	
3.	Не	lp the student correct his or her response.	
	•	"Let me rephrase the question:question]?"	[restatement of
	•	"Let's start by thinking aboutthe question].	[smaller or simpler part of
	•	"Would you like more time to think about it?"	
	•	"Think about what we know aboutdoes that change your answer?"	[hint or cue]. How
	•	"Can you explain the thinking behind your answ	wer?"

#### **Letting Students Off the Hook Temporarily**

If a student becomes flustered, confused, or embarrassed while answering a question, the teacher lets the student pass temporarily. However, the teacher should return to the same student at a later time (in either a whole-class or one-on-one context) and ask this student to answer a different question or assist him or her with thinking through the initial question when the student feels calmer.

#### **Teacher Actions**

- Letting students (particularly reluctant learners) pass temporarily if they become embarrassed or flustered while answering a question
- Following up at a later time with students who opted out of a question
- Using different questions or rephrasing the original question during follow-up

#### **Desired Student Responses**

- Correctly responding at a later time to questions that they temporarily opted out of
- Correctly answering alternative or rephrased questions
- Describing the teacher as someone who won't embarrass students

#### Extra Support

 Tracking how often specific students opt out of answering a question and meeting with these students individually to encourage them and help them fill in holes in their understanding of the content

#### **Extension**

 Helping students who have trouble answering questions in front of the class use specific strategies to gradually feel more comfortable answering in front of the class

#### **Technology Tips**

• If a student opts out temporarily, allow him or her to respond to the question later by email.

# **Temporary Opt-Out Tracking Log**

Student Name	Question Opted Out Of	Check After Follow-Up

#### **Answer Revision**

The teacher uses elaborative interrogation techniques to help a student probe his or her answer until the student realizes that it is not defensible. The teacher might respond to a student's incorrect answer with questions such as, How do you know that to be true? and What evidence can you give to support that conclusion?

#### **Teacher Actions**

- Asking a student (particularly a reluctant learner) probing questions to help him or her realize the answer given is not defensible
- Helping a student revise his or her answer to be defensible

#### **Desired Student Responses**

- Recognizing when their answers are not defensible
- Revising indefensible answers to include valid evidence and support

#### **Extra Support**

• Asking students to revise specific parts of their responses to questions (rather than their whole response)

#### **Extension**

• Asking students to explain how revising one part of their answer to a question caused them to think about other parts of the question differently

#### **Sample Elaborative Questions**

- How did you arrive at that answer?
- What makes you think that's true?
- What evidence supports your answer?
- Is there another conclusion your evidence might support?
- Could you draw a different conclusion from the same evidence?
- Can you explain the reasoning behind your answer?
- If someone challenged your answer, how would you defend it?
- Can you think of other possible answers to the question?

#### **Think-Pair-Share**

This strategy was originally developed by Frank Lyman in the article "The Responsive Classroom Discussion: The Inclusion of All Students," which was published in *Mainstreaming Digest* in 1981.

The teacher uses this structure to allow reluctant learners time to rehearse and correct answers before sharing them in front of the class. First, the teacher asks or displays a question and students briefly think about the answer individually. Then, students form pairs and tell their partners their best answers to the question. Pairs discuss and come to a consensus about their answer. The teacher then asks pairs to share their answers with the class.

#### **Teacher Actions**

- Asking students to consider a question individually
- Asking students to share their answers with a partner and revise them if necessary
- Asking students to share their answers with the class

#### **Desired Student Responses**

- Considering questions individually before conferring with a partner
- Revising answers, if necessary, after conferring with a partner

#### **Extra Support**

• Creating a protocol to ensure that both students in a pair share their answers and the reasoning behind them

#### **Extension**

 Asking students to identify similarities and differences between their answer and their partner's answer

## **Think-Pair-Share Worksheet**

My answer:	My partner's answer:
If the day have a second secon	
If I had to share our discussion with the clas	s, i would say:

## **REPRODUCIBLES**

Teachers can use the following reproducibles to monitor their implementation of this element. The reproducible titled Tracking Progress Over Time helps teachers set goals related to their proficiency with this element and track their progress toward these goals over the course of a unit, semester, or year. Tracking Teacher Actions and Tracking Student Responses allow observers in classrooms to monitor specific teacher and student behavior related to this element. Teachers themselves can also use the Tracking Student Responses reproducible to document instances of student behaviors during class. The Strategy Reflection Log provides teachers a space to write down their thoughts and reflect on the implementation process for specific strategies related to this element. Finally, this section provides both a student survey and a teacher survey, the results of which provide feedback about teachers' proficiency with this element.

# **Tracking Progress Over Time**

Use this worksheet to set a goal for your use of this element, make a plan for increasing your mastery, and chart your progress toward your goal.

Ele	men	t:											
Init	tial S	core	:										
Go	Goal Score:					by				(	_ (date)		
Sp	ecific	c thin	gs I ar	m going	to do to	improv	ve:						
	4												
	3												
Score on Element	3												
Eler	2												
re on													
Scol	1												
	0		a	b	С	d	е		f	g	h	i	j
							Date						
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# **Tracking Teacher Actions**

During an observation, the observer can use this form to record the teacher's usage of strategies related to the element of probing incorrect answers with reluctant learners.

Observation Date and Time:	Length of Observation:

Check Strategies You Intend to Use	Strategies	Description of What Was Observed
	Using an Appropriate Response Process	
	Letting Students Off the Hook Temporarily	
	Answer Revision	
	Think-Pair-Share	
	Other:	
	Other:	

## **Tracking Student Responses**

A teacher or observer can use this worksheet to record instances of student behavior to inform planning and implementation of strategies associated with probing incorrect answers with reluctant learners. Any item followed by an asterisk is an example of undesirable behavior related to the element; the teacher should look for a decrease in the number of instances of these items.

Observation Date and Time:	Length of Observation:
Behavior	Number of Instances
Attempting to answer questions they are unsure about	
Avoiding difficult questions*	
Answering probing questions without embarrassment	
Asking to opt out temporarily	
Thinking about a question and following up later	
Discussing answers with a partner	
Revising answers in response to teacher or peer feedback	
Other:	
Other:	

# **Strategy Reflection Log**

Use this worksheet to s strategy.	select a strategy, set a goal, and reflect on your use of that
Element:	
Date	How did it go?

PRODUCIBLE

# Student Survey for Probing Incorrect Answers With Reluctant Learners

1. My teacher asks me to explain the thinking behind my answers to questions.

Strongly Disagree Disagree Neither Agree Agree Strongly Agree

2. My teacher doesn't let me give up when the work gets hard in this class.

Strongly Disagree Disagree Neither Agree Agree Strongly Agree

3. If I answer a question incorrectly, my teacher helps me go back and think about why my answer was wrong.

Strongly Disagree Disagree Neither Agree Agree Strongly Agree

4. My teacher is willing to phrase questions differently to help me understand them.

Strongly Disagree Disagree Neither Agree Agree Strongly Agree

5. My teacher expresses appreciation when I answer a question.

Strongly Disagree Disagree Neither Agree Agree Strongly Agree

6. If I don't understand a question, my teacher will break it into smaller parts.

Strongly Disagree Disagree Neither Agree Agree Strongly Agree

# Teacher Survey for Probing Incorrect Answers With Reluctant Learners

1.	l ask stude	ents to explain their	thinking when the	ey give an incor	rect answer.
Ofte	en	Sometimes	Rarely	Never	I don't know
2.		s give an incorrect a he question.	nswer or don't und	derstand my qu	iestion, l
Oft	en	Sometimes	Rarely	Never	I don't know
3.		s give an incorrect a on into smaller or si		derstand my qu	iestion, I break
Oft	en	Sometimes	Rarely	Never	I don't know
4.		nt becomes frustrate I let him or her opt o		•	•
Oft	en	Sometimes	Rarely	Never	I don't know
5.	I use prob	ing questions to hel	p students identify	y and correct th	neir mistakes.
Oft	en	Sometimes	Rarely	Never	I don't know
6.	My studer	nts would say that I I	help them answer	questions succ	essfully.
Oft	en	Sometimes	Rarely	Never	l don't know
7.	My studer	nts would say that I	don't let them give	e up.	
Oft	en	Sometimes	Rarely	Never	I don't know