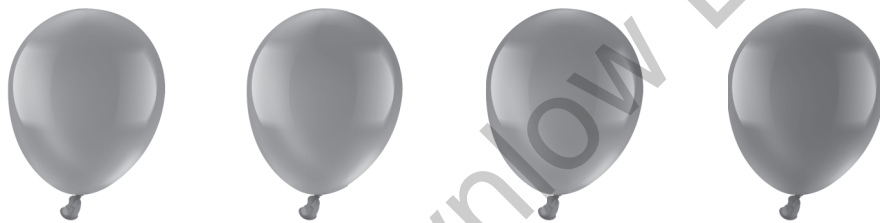


RAISING THE RIGOR

Effective Questioning Strategies and Techniques for the Classroom



E i l e e n D e p k a

© Hawker Brownlow Education

TABLE OF CONTENTS

About the Author.....ix

Introduction 1

Chapter 1

Using Questioning Strategies in the Classroom 5

A Call to Action 6

Making a Difference With Questioning Strategies..... 8

Benefitting Both Students and Teachers 9

Requiring Transition and Perseverance 10

Applying a Process..... 11

In Summary..... 12

Chapter 2

Deconstructing Higher-Order Thinking Skills..... 13

Building Higher-Order Thinking Skills With Tasks..... 14

Using a Template to Design Tasks 15

Indicators of Student Engagement in Higher-Order Thinking Skills..... 18

Connecting Bloom's Taxonomy to Higher-Order Thinking Skills 25

Introduction and Terminology 25

Bloom's Taxonomy in Action 26

Connecting Webb's Depth of Knowledge Framework
to Higher-Order Thinking Skills 30

Introduction and Terminology 31

DOK Levels in Action..... 31

In Summary..... 33

Chapter 3

Developing Effective Assessments..... 35

Establishing Balanced Assessment Practices	35
Designing Assessment	37
Developing Assessment	38
Defining the Framework	41
Using Bloom’s Taxonomy to Build Assessments	42
Including Specific Tasks in Assessments.....	48
In Summary.....	50

Chapter 4

Ensuring Student Success With Complex Questions 51

Addressing an Uneven Playing Field	52
Providing Supports to Reach Deeper Levels of Understanding.....	53
Using Questions to Differentiate Student Assignments.....	55
Developing Essential Questions for Higher-Order Thinking.....	57
Using the KISS Principle	58
Analyzing Questions for Complexity Versus Difficulty.....	60
In Summary.....	62

Chapter 5

Creating Standards-Based Questions and Tasks 63

Deconstructing Standards With a Systematic Approach	63
Splitting the Standard	64
Pinpointing Verbs	64
Using the Remaining Language	69
Building Standards-Based Questions	72
In Summary.....	74

Chapter 6

Encouraging Traits to Attain College and Career Readiness. 75

Investigating College and Career Readiness Traits	75
Relating to Others	76
Strong Communication and Active Listening	76
Good Judgment, Responsibility, and Initiative.....	77
Developing College and Career Readiness Traits in Students	77
In Summary	82

Chapter 7

Encouraging Student Involvement..... 83

Building the Foundation for Successful Discussions.....	84
Making Connections.....	85
Building an “I Can Do It” Belief System.....	85
Establishing a Climate of Respect.....	85
Ensuring Engagement and Participation	87
Encouraging Thinking and Deepening Understanding.....	88
Reflecting on Classroom Questioning Practices	90
In Summary	93

Chapter 8

Growing Students’ Ability to Ask Questions That Matter.. 95

Using Approaches That Teach Questioning Strategies.....	96
Engaging in Socratic Circles	97
Using Teaching, Templates, and Tools	98
In Summary	100

Epilogue

Pulling It All Together 103

References and Resources..... 107



INTRODUCTION

Teaching can bring us great joy and present huge challenges. It is rewarding and frustrating, often at the same time. It is a profession like no other. We can impact the lives of hundreds of young individuals. We can make a difference.

But teaching is a huge responsibility. Although we want what is best for our students, that path is not always clear. There are thrilling moments when students demonstrate their knowledge and skills successfully. There are moments of confusion when students state loudly and clearly, “We never learned this before!” regarding concepts that teachers covered the previous year. There is always need for a patient response, reteaching, reminders, and new experiences to solidify previous learning.

Some students engage in classroom discussion; others sit back and watch, probably still learning, but not through active involvement. Some students participate consistently, some occasionally, some not unless teachers invite them to respond. Some are confident in their ability to respond. Some are afraid. Some are simply disengaged. That’s where this book comes in.

About This Book

This book provides information, strategies, and examples to use during classroom discussions as well as within assignments and assessments. It provides recommendations for effectively designing questions to set the stage for quality discussions that engage and inspire students. Promoting higher-order thinking skills not only actively engages students’ minds but supports a deeper, more meaningful

level of understanding. In the pages that follow, you will find easy and effective practices for accomplishing just that.

Chapter 1 lays the groundwork and highlights the impact that questioning techniques can have on student achievement. High-quality questions help students make connections among previously learned content and personal experiences. When questioning helps students discover, evaluate, and apply content, teachers have the opportunity to increase students' ability to analyze and use information to a greater extent. Students are more likely to experience success when applying their knowledge and skills to new or unique situations.

Chapter 2 concentrates on identifying, explaining, and providing examples for various questioning techniques and structures. This chapter also introduces the concept of higher-order thinking skills and takes a deep look at Bloom's (1956) taxonomy and its use for question development at a variety of sophistication levels. It shows you how Webb's (1997) Depth of Knowledge framework helps you align standards and tasks to levels of cognitive complexity. Visit go.hbe.com.au/instruction for an interview with Dr. Norman Webb about the Depth of Knowledge.

In chapter 3, I discuss the connection between a question's intent and its format, including quality assessment practices and examples.

Chapter 4 provides examples of the types of support that students need to grow their ability to respond successfully to complex and rigorous questions. This section will consider the connection between complex questions, background knowledge, and text complexity. It highlights ways to scaffold questions and support student understanding. The strategies increase students' opportunities to succeed, because they're responding to questions designed with increased rigor and more sophisticated content.

A process in chapter 5 assists you in deconstructing standards' components so that you can develop quality questions based on those standards. It reveals connections between the types of questions generated and the level of complexity indicated within the standards. It provides templates and examples that will support the creation and organization of multiple standards-based questions. Standards-based assessments rely on questions generated through this process.

Chapter 6 delves into components related to questioning to support students in long-term success. It covers college and career readiness skills, including traits like critical thinking, perseverance, problem solving, and communication.

Laying groundwork that promotes an atmosphere of respect, collaboration, and openness to the ideas of others is the topic of chapter 7. It shares multiple techniques to institute questioning strategies that encourage advanced thought and discussion. Methods of evaluation show you how to analyze student beliefs and reflect on classroom practices.

Chapter 8 explains why students need to understand the art of questioning. I discuss practices that provide students with the ability to understand, respond to, and create questions

at increased levels of sophistication. You will also find strategies for teaching students how to formulate questions that are at varied levels of difficulty.

The epilogue reiterates key points and provides a global summary of practices that promote a positive, productive approach to question design and implementation.

My goal is to give readers easy-to-implement strategies, templates, and examples to increase higher-order thinking skills and to deepen student understanding. Don't we all want students to think deeply?

© Hawker Brownlow Education



CHAPTER 1

Using Questioning Strategies in the Classroom

There are only so many hours in a day. We have approximately 180 days in the classroom with students, and in an average day, a teacher is likely to spend about five solid hours with students. Clearly, our goal is to make the best use of that time. We want to use practices and strategies that will most benefit our students. We aim to use processes and procedures that increase our ability to get the most effective use from our time and that of our students.

And how do we determine effectiveness? Standards and content are the focus of education in the early 21st century. We use both to identify what is important for our students to learn. Evaluating student progress helps us evaluate those targets important to the lessons we teach and to better understand our students' performance levels. We evaluate data so that we can best meet all learners' needs. For example, the 2015 National Assessment of Educational Progress (NAEP) data show little progress and low student achievement (NAEP, n.d.). Reviewing and understanding these components, which we do in this chapter, helps us create a systematic approach to lesson identification and development.

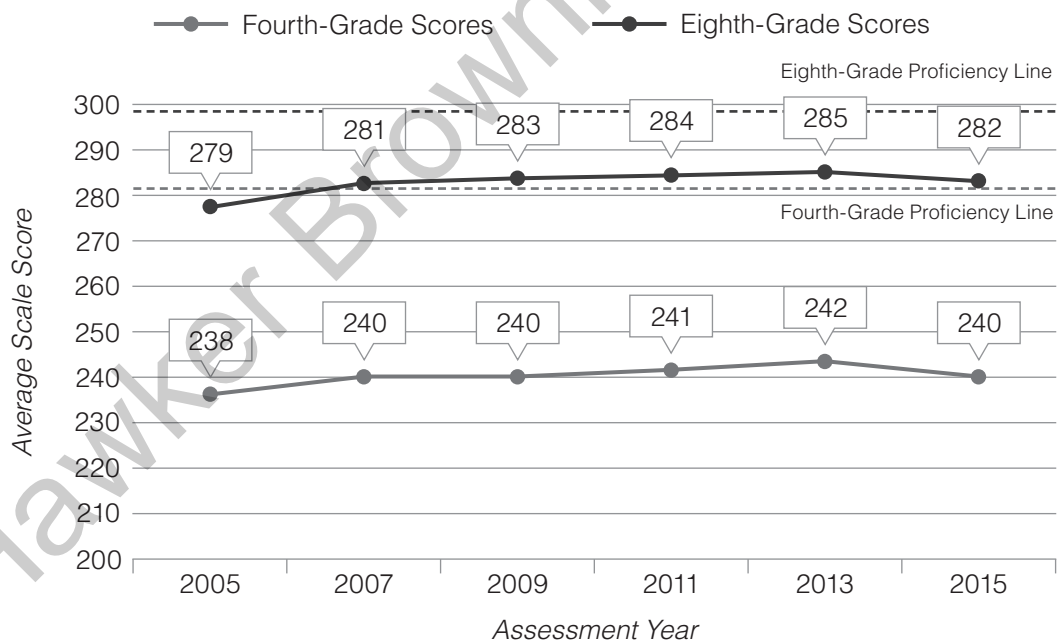
If, as part of that approach, we take time to evaluate the types of questions we ask—even the ways we ask them—we will positively impact students' levels of understanding and performance. We can create different questioning strategies, as explained in this chapter. We even have the opportunity to develop habits in our students that will transcend the classroom. Our approach to formulating, posing, and

responding to questions can increase students' curiosity, grow their problem-solving skills, escalate engagement levels, and strengthen their ability to persevere.

A Call to Action

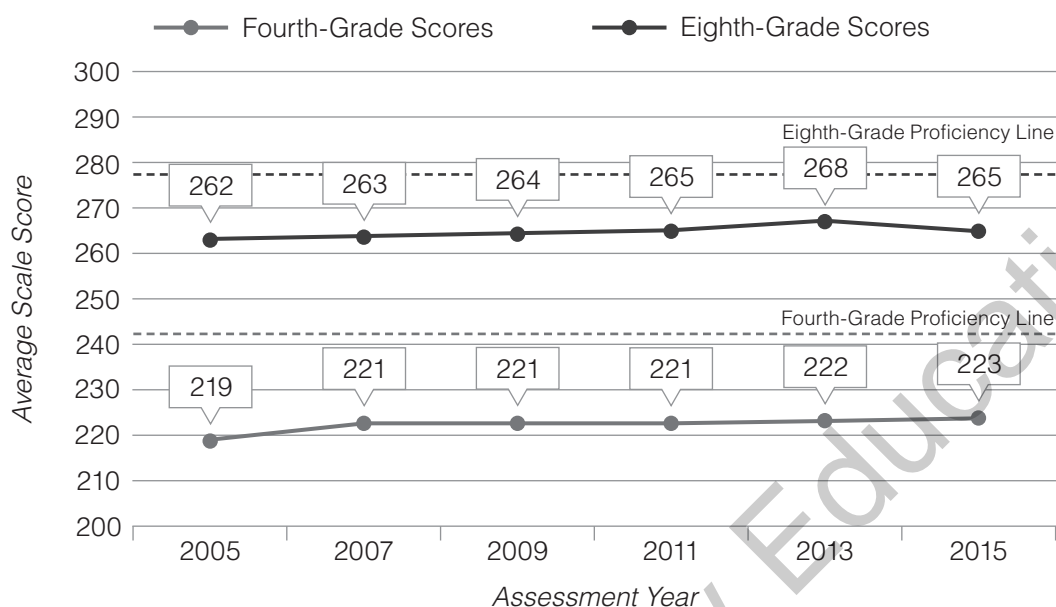
Can we influence our students' academic abilities by being aware of the questions we ask and the way we ask them in the classroom? Evidence in the 2015 National Assessment of Educational Progress (NAEP, n.d.) definitely shows a need for a boost in U.S. academic performance. The NAEP is a U.S. standardized test that evaluates and reports student progress in a variety of subjects including mathematics and reading. The assessment compares subject-level achievement across states.

The 2015 NAEP results reveal that 40 percent of fourth-grade students are proficient or higher in mathematics. In eighth grade, that number is 33 percent. Reading results show proficiency levels of 36 percent and 34 percent in fourth and eighth grades, respectively. It's not because teachers aren't dedicated to boosting academic performance but because those devoted teachers keep searching for strategies that will positively impact student performance. Figure 1.1 shows NAEP results in mathematics, and figure 1.2 shows NAEP results in reading, illustrating how U.S. students have fared over time. The results in both subjects show little variation since 2005.



Source: NAEP, n.d.

Figure 1.1: NAEP results in mathematics over time.



Source: NAEP, n.d.

Figure 1.2: NAEP results in reading over time.

Reviewing the figures shows us that in mathematics and in reading, in fourth grade and in eighth grade, the average national scale scores are well below the established proficiency level. The dotted lines on each chart indicate the proficiency level for each grade level.

If NAEP results are an accurate illustration of the performance level of students in the United States, it seems the data strongly suggest that a call to action is in order. With the highest level of performance at 40 percent, the results are not something that we would be proud of in our own classrooms. Growing these scores to reach or at least be near proficiency requires a change. Although making a significant change in these scores may seem like an insurmountable task, change happens one classroom at a time. Tests results like the Programme for International Student Assessment (PISA) can determine strengths and challenges by subject and country. Fifteen-year-olds take tests in mathematics, science, and reading. In 2012, about 28 million students took the PISA (Organisation for Economic Co-operation and Development, n.d.). Results, at www.oecd.org/pisa/keyfindings/pisa-2012-results.htm, can be compared. No matter what the assessment, the goal is to learn from the data and act to support student learning.

Teachers care about their students. They put a lot of effort into planning and presenting lessons designed to help students succeed. What do we do when results reflect that less than