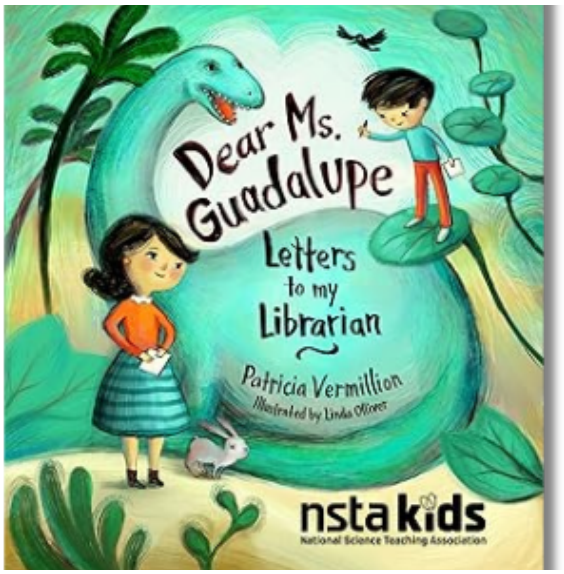
FACT, FICTION, AND SCIENTIFIC THINKING WITH DEAR MS. GUADALUPE

A Mentor Text Approach to NGSS Engineering Practices for Grades PK–2



DEAR MS. GUADALUPE: LETTERS TO MY LIBRARIAN

Written by Patricia Vermillion
Illustrated by Linda Olliver
Published by NSTA Kids

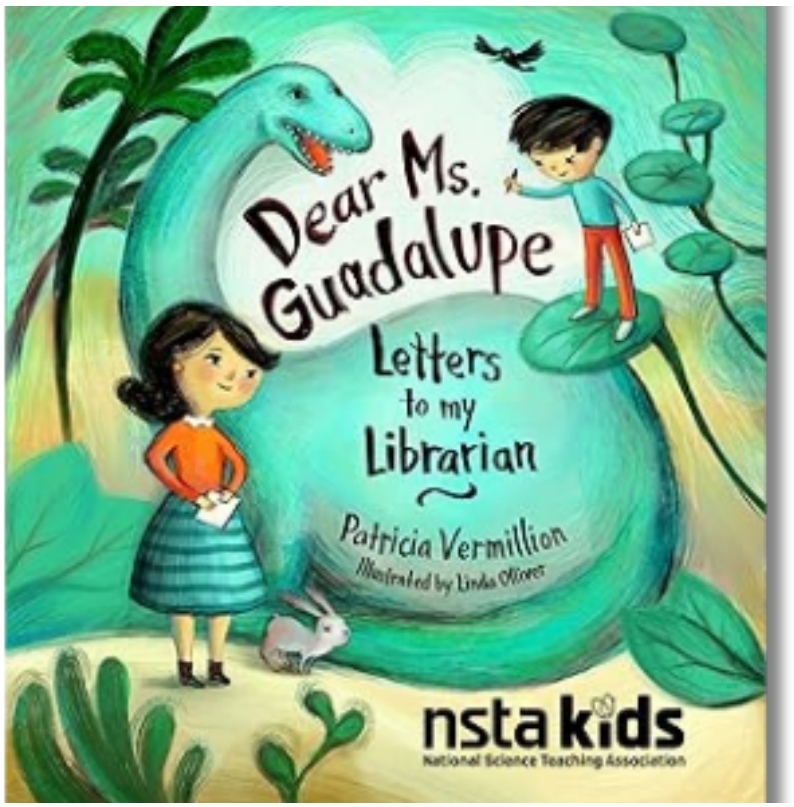
ALIGNED TO NGSS K-2-ETS1-1 & CCSS LITERACY

Classroom-ready • Inquiry-based • Easy to implement

Packet prepared by
Debbie Gonzales, MFA

Guides by deb

Table of Contents



About This Teaching Packet

This teaching packet highlights one classroom-ready lesson sequence inspired by *Dear Ms. Guadalupe: Letters to My Librarian*. It is designed to support teachers in using the book as a mentor text for scientific thinking, discussion, and writing.

The focus of this packet is the Fact vs. Fiction lesson, which helps students explore how curiosity, imagination, and evidence work together in science. Students ask questions, gather information from the text, and revise their thinking—key practices in early science and engineering learning.

How This Packet Connects to the Full Educator Guide

This packet is intentionally not a replacement for the complete *Dear Ms. Guadalupe* educator guide. Instead, it serves as an entry point that highlights and extends one core lesson.

- The Fact vs. Fiction T-Chart, sentence-strip manipulatives, and labels referenced in this packet are included in the full educator guide created for this book.
- The full guide also features additional lessons, discussion prompts, projects, printables, and expanded standards alignment.

Teachers are encouraged to explore the complete guide for a deeper and more comprehensive instructional experience.

The full educator guide is available for free download at: www.patriciavermillion.com/school-visit-guides/

About the Student Lesson Handout

The two-page student lesson handout included in this packet is formatted as a standalone resource. It may be downloaded, printed, and shared independently for:

- Conference or workshop participants
- Classroom use
- Professional learning sessions

The second page includes a letter-writing template that supports students in explaining how their thinking changed as they gathered new information—modeling scientific communication in a child-friendly way.

Why Use This Lesson

This lesson demonstrates how a single picture book can support:

- NGSS-aligned science and engineering practices
- Evidence-based discussion
- Authentic writing for a real purpose

By combining story, inquiry, and communication, students learn that science begins with curiosity and grows through evidence.

We invite educators to explore the full educator guide and discover additional ways to extend learning with Dear Ms. Guadalupe.

One-Page Teacher Planning Guide

Lesson Purpose

In this lesson, students use *Dear Ms. Guadalupe* as a mentor text to explore how imagination and evidence work together in science. Through discussion, a Fact vs. Fiction T-Chart, and a short letter-writing activity, students practice asking questions, gathering information from text, and revising their thinking when new evidence is introduced. The lesson also models early science and engineering practices by showing students that curiosity leads to questions—and evidence helps improve ideas.

Instructional Focus

Students will:

- Ask questions based on observations from the story
- Gather information from text-based evidence
- Distinguish between imaginative ideas and scientific facts
- Explain how new information changed their thinking
- Communicate ideas through discussion, drawing, and writing

Materials

- *Dear Ms. Guadalupe: Letters to My Librarian,* the book
- Chart paper, whiteboard, or document camera
- Fact vs. Fiction T-Chart (available in the full educator guide)
- Sentence strips or quoted statements from the text (available in the full educator guide)
- Writing paper or letter-writing template (for student response)

Note: The Fact vs. Fiction T-Chart, labels, and sentence-strip manipulatives referenced in this lesson are included in the complete Dear Ms. Guadalupe *educator guide.*

Standards at a Glance

Next Generation Science Standards (NGSS): K-2-ETS1-1 — Engineering Design

Students ask questions, make observations, and gather information to define a simple problem that can be improved through new ideas or solutions.

Science & Engineering Practices

- Asking questions
- Making observations
- Defining simple problems
- Communicating ideas

Common Core State Standards (CCSS) — Literacy

Reading

- RI.2.1 — Ask and answer who, what, where, when, why, and how questions using details from the text

Writing

- W.2.6 — Use writing, drawing, and digital tools to communicate ideas
- W.2.8 — Recall information from experiences or gather information from provided sources to answer questions

Teaching Note: This lesson emphasizes that changing your mind is part of learning. Students experience how scientists and engineers improve ideas by asking questions and using evidence.

Fact, Fiction, and Scientific Thinking

In this lesson, students use Dear Ms. Guadalupe *as a mentor text to explore how imagination and evidence work together in science. Students ask questions, gather information from the story, and decide which ideas are imaginative and which are supported by scientific facts.*

Step 1: Read & Wonder

- Read selected letters from Dear Ms. Guadalupe aloud.
- Ask students:
  - What does Joey think is happening?
  - What questions does he have?
  - What clues does he notice?
- Explain that scientists and engineers start with questions before they know the answers.

Step 2: Fact or Fiction Discussion

- Create a two-column chart labeled:
  - Joey's Imagination | Scientific Facts
- Read or display the statements below. After each one, ask students:
  - Is this imagination or a scientific fact?
  - What makes you think that?
  - Do we need more information?
- Teachers may record student thinking directly on the chart.

Statements for Discussion

- "I think a dinosaur lives by the creek."
- "I'm sure these footprints belong to the Texasaurus."
- "I left carrots by the creek. The dinosaur must have liked them."
- "Do you think the dinosaur likes jokes?"
- "Dinosaurs lived in forests, wetlands, and plains."
- "Some dinosaurs ate plants, and some ate meat."
- "The Technosaurus lived in Texas millions of years ago."
- "Scientists learn about dinosaurs by studying fossils."

(Teachers may choose a few statements or use all, depending on time.)

Teaching Tip

Imagination is not wrong — it helps us ask questions.
Science helps us decide which ideas are supported by evidence.

Step 3: Talk About Changing Ideas

- Ask:
  - Did anyone change their mind today?
  - What new information helped?
  - Why is it okay to change your thinking?
- Explain that scientists and engineers improve ideas when they learn more.

Writing Extension (Template)

Writing Like a Scientist

- Students may use the template below to write a short letter explaining how their thinking changed.
- Students may draw pictures, dictate sentences, or write independently.

Teacher Note

The complete Dear Ms. Guadalupe *educator guide includes printable T-charts, sentence-strip manipulatives, and additional lessons. Educators are encouraged to download the full guide at www.patriciavermillion.com/school-visit-guides/.*

Dear _____,

I have been thinking a lot about dinosaurs, lately.

At first, I thought _____

After learning more, I now know _____

The information that helped me was _____

I still wonder _____

There is so much to think about when it comes to science, isn't there?

Your friend,

_____

Time-Stamped Lesson Plan (45–90 Minutes)

This lesson may be taught in one session or extended across multiple days.

Materials

- *Dear Ms. Guadalupe: Letters to My Librarian,* the book
- Chart paper, whiteboard, or document camera
- Marker
- Student lesson handout (Page 1: Discussion Statements; Page 2: Letter Template)

0–5 Minutes — Lesson Launch: Curiosity First

- **Teacher Action**
  - Introduce the book and explain that students will think like scientists and engineers
  - Emphasize that imagination helps us ask questions
  - *Teacher Language:* "Today we're going to use a story to help us think like scientists. We'll ask questions, learn new information, and see how our ideas can change."
- **Instructional Focus**
  - Build excitement
  - Normalize wondering and curiosity
- **Standards Connection**
  - NGSS K-2-ETS1-1: Asking questions based on observations

5–15 Minutes — Read-Aloud & Wondering

- **Teacher Action**
  - Read aloud selected early letters from Joey
  - Pause to highlight Joey's ideas and questions
- **Guiding Questions**
  - What does Joey think is happening?
  - What does he notice?
  - What questions does he have?
- **Instructional Focus**
  - Observing
  - Asking descriptive questions
  - Listening closely to text
- **Optional Standards Language (if naming aloud)**
  - "Scientists and engineers always start by asking questions."

15–35 Minutes — Core Activity: Fact vs. Fiction Discussion

- **Teacher Action**
  - Create a two-column chart labeled:
  - Joey's Imagination | Scientific Facts
  - Use the listed statements from the student handout
  - Read one statement at a time and invite discussion

- **Discussion Prompts**
  - Is this imagination or a scientific fact?
  - What makes you think that?
  - Do we need more information?
- **Teacher Tip**
  - Record student thinking using words or simple drawings
  - Allow students to change their minds as discussion continues
- **Instructional Focus**
  - Gathering information from text
  - Comparing ideas to evidence
  - Defining a simple problem: Which ideas are supported by facts?
- **Standards Connection**
  - NGSS K-2-ETS1-1: Defining a simple problem using gathered information
  - CCSS RI.2.1: Answering questions using text details

35–50 Minutes — Discussion: Changing Ideas

- **Teacher Action**
  - Review the completed T-Chart
  - Highlight examples where thinking changed
- **Key Teaching Point**
  - "In science, changing your mind means you learned something new."
- **Reflection Questions**
  - Which idea changed today?
  - What new information helped?
  - Why is it okay to improve an idea?
- **Instructional Focus**
  - Revising thinking
  - Respectful discussion
  - Metacognition

50–65 Minutes — Writing Extension: Letters as Scientific Thinking

- **Teacher Action**
  - Introduce the letter-writing template
  - Explain that students will write like Joey
- **Student Task**
  - Students reflect on how their thinking changed by completing the letter using:
    - drawing
    - dictation
    - writing
- **Instructional Focus**
  - Communicating thinking
  - Explaining learning
  - Connecting science and writing

- **Standards Connection**
  - CCSS W.2.8: Gathering information to answer a question
  - CCSS W.2.6: Communicating ideas through writing and drawing

65–80 Minutes — Sharing & Reflection (Optional)

- **Teacher Action**
  - Invite volunteers to share part of their letter
  - Celebrate thoughtful questions and revisions
- **Optional Prompts**
  - What are you still wondering?
  - What would you like to learn next?

80–90 Minutes — Lesson Wrap-Up

- **Teacher Closing**
  - "Today we learned that imagination helps us ask questions, and evidence helps us understand the world better."
- Reinforce that:
  - science begins with curiosity
  - learning grows through evidence
  - questions are always welcome

Optional 45-Minute Version

- Combine read-aloud and discussion
- Model the T-Chart with 3–4 statements
- Introduce (but do not complete) the letter-writing activity

Teacher Note: The complete Dear Ms. Guadalupe *educator guide includes printable T-charts, sentence-strip manipulatives, and additional lessons. Educators are encouraged to download the full guide at www.patriciavermillion.com/school-visit-guides/.*

Standards Alignment & Instructional Rationale

Instructional Rationale

This lesson uses Dear Ms. Guadalupe: Letters to My Librarian as more than a read-aloud. The text functions as a mentor text, guiding students to observe closely, ask questions, gather information, and revise their thinking based on evidence.
Rather than separating literacy and science, this lesson intentionally blends them. Students engage in discussion, analysis, and writing to practice the same thinking processes used by scientists and engineers—at a developmentally appropriate level. The instructional goal is not memorizing facts about dinosaurs but learning how scientific thinking works.

NGSS Alignment: Engineering Design

- NGSS K-2-ETS1-1
  - Students ask questions, make observations, and gather information about a situation people want to change in order to define a simple problem.

How This Lesson Aligns

- In this lesson, students:
  - Ask questions based on Joey's observations and claims
  - Make observations while listening to and revisiting the text
  - Gather information from Ms. Guadalupe's factual explanations
  - Define a simple problem: Which ideas are imaginative, and which are supported by evidence?
  - Improve ideas by revising their thinking as new information is introduced
  - This mirrors early engineering design thinking, where learners clarify a situation, question assumptions, and use evidence to improve understanding before proposing solutions.

- **Science & Engineering Practices**
  - This lesson explicitly supports the following practices:
    - Asking questions
    - Making observations
    - Defining simple problems
    - Communicating information through words, drawings, and discussion
  - Students experience these practices as part of a natural learning process rather than isolated skills.

- **Crosscutting Concept: Patterns of Thinking**
  - Students begin to notice patterns such as:
    - Imaginative ideas often come before evidence
    - Evidence can change what we think
    - Learning is an ongoing process
    - These patterns help young learners understand how knowledge is built over time.

Common Core State Standards (CCSS) — Literacy

- **Reading**
- RI.2.1: Students ask and answer who, what, where, when, why, and how questions using details from the text as evidence.

- **Lesson Connection:**
  - Students justify why a statement belongs under fact or imagination using clues from the story.

- **Writing**
  - W.2.6: With guidance and support, students use writing, drawing, and digital tools to communicate ideas.
  - W.2.8: Students recall information from experiences or gather information from provided sources to answer a question.
- **Lesson Connection:**
  - The letter-writing activity asks students to explain how their thinking changed after gathering new information, reinforcing writing as a tool for explanation and reflection.

- **Why This Lesson Works Instructionally**
  - Honors student curiosity and imagination
  - Builds evidence-based reasoning skills early
  - Integrates science and literacy authentically
  - Encourages discussion, reflection, and revision
  - Aligns with NGSS expectations without requiring complex materials
  - This lesson demonstrates that young students are capable of real scientific thinking when given meaningful texts, thoughtful questions, and opportunities to communicate their ideas.

- **Connection to the Full Educator Guide**
  - This lesson is adapted from the complete Dear Ms. Guadalupe educator guide, which includes:
  - Printable T-charts and sentence-strip manipulatives
  - Additional lessons and projects
  - Expanded discussion prompts
  - Full standards alignment
  - Educators are encouraged to download the complete guide at www.patriciavermillion.com/school-visit-guides/.

Science begins with curiosity—and grows through evidence, conversation, and reflection.