Greater Good in Education
SCIENCE-BASED PRACTICES FOR KINDER, HAPPIER SCHOOLS

NURTURING STUDENTS' WONDER AND CURIOSITY

"Did you know that when you wonder, you're learning?"

—Fred Rogers

OVERVIEW

Activities that help educators tap into students' questions and encourage them to wonder about the world around them.

PLANNING FOR IT

WHEN YOU MIGHT USE THIS PRACTICE

- When starting a new unit or focus of study
- To build a classroom climate of wonder and collaboration
- Before going outside or on a field trip

TIME REQUIRED

- ≤ 30 minutes

LEVEL

- PreK/Lower Elementary

MATERIALS

- *You Wonder All the Time* by Deborah Farmer Kris

LEARNING OBJECTIVE

Students will:

- Practice articulating questions, including "Why?" and "What if?" questions

- Expand their curiosity and capacity for wonder
- Communicate questions with classmates
- Investigate topics of interest

ADDITIONAL SUPPORTS

- Making Practices Culturally Responsive
- Adapting Practices for Students with Special Needs
- Making a Practice Trauma-Informed
- Making Classrooms and Schools Trauma-Informed and Healing-Centered

CHARACTER STRENGTHS

- Wonder
- Awe
- Curiosity

SEL COMPETENCIES

- Self-Awareness
- Social Awareness

MINDFULNESS COMPONENTS

- Focused attention
- Open Awareness
- Non-judgment

HOW TO DO IT

REFLECTION BEFORE THE PRACTICE

- Take a moment to think of a recent time when your curiosity or sense of wonder was sparked.
    - Did something happen that made you ask, "I wonder why....?"
    - Did you take a walk in nature and observe something that filled you with awe and amazement?
    - Did you experiment with a new way of doing something and learn something new?
    - Did you visit a library or bookstore and found a book on a topic that is totally new to you and that you're excited about?
- How did it feel to explore something new? Did it motivate you to want to learn more? Did you notice a shift in your emotional state?

INSTRUCTIONS

OVERVIEW

Begin by asking students "What does it mean to wonder about something?" After sharing ideas, read the book, *You Wonder All the Time* by Deborah Farmer Kris. Tell students that each question in this book was inspired by a real question from the author's children and students. Use one or more of the following extension activities to support their wonder and ability to ask questions. These can be used immediately after reading the book or at a later point.

EXTENSIONS

- Reread the book. This time, ask students to identify a question they know the answer to—and a question they don't know the answer to. If they don't know the answer, how can they "think it through … look it up … find it out together" (as the book says on the final page)?
- Talk about all the words that can be used to start a question: Who? What? When? Where? Why? Wow? Can I? What if? (see first page of the book). Write each starter on a large piece of paper and see if the class can generate additional questions under each of these categories.
- Ask students to write and illustrate an additional page or two of the book—with NEW "Why?" or "What if?" questions. Students can use ideas from a group brainstorm or generate new questions of their own.
- Have students choose two questions from the class list or their individual list that they do not know the answer to—questions that spark their curiosity. Go to the school library with those questions on a piece of paper. With the support of the librarian, help them to find a book that might help them answer one of those questions. Encourage them to keep exploring this question at home. During class meetings, give students an opportunity to share their questions and what they've learned.
- Create an "I Wonder Why . . . " board in the classroom where students can add their questions and wonderings. Encourage kids to add their name after their question so that classmates who are interested in the same topic or who have expertise can collaborate with them to find answers.
- Before going on a nature walk, on a field trip, or when starting a new topic, ask the class to generate questions about what they might see or learn. For example, "We might see clouds on our walk. What questions do you have about clouds?" or "We will see a mummy at the museum. What do you want to know about mummies?" or "We are going to study the solar system this month. Let's see how many questions we can generate about space?" Use the headings "Who? What? When? Where? Why? How? and What if?" to categorize their questions.

REFLECTION AFTER THE PRACTICE

- Are your students more willing to ask their questions? Has it become easier for students to generate questions? Are they more engaged in learning when they are prompted to explore their questions? Have you found new ways to integrate their questions into group or independent learning?

THE RESEARCH BEHIND THE PRACTICE

EVIDENCE THAT IT WORKS

In a study of a diverse group of 6,200 Kindergartners, researchers found that curiosity is significantly linked to higher scores in both reading and mathematics, particularly for children with lower socioeconomic status.

Another study with teens in Hong Kong found that when school is more challenging, curious students perform better than their less curious peers on academic achievement tests.

WHY DOES IT MATTER?

Wondering is a form of curiosity. When we ask questions, we are using our observation and reasoning skills. When students are curious, they are not only motivated to learn, but they also learn more effectively.

As educators, we have the opportunity to create more spaces and places for joyful exploration. Our classrooms can become curiosity centers where students share what fascinates and energizes them. By welcoming and celebrating curiosity at school, we can not only help our students learn but also contribute to their well-being in life.

SOURCE