

Tips from Teachers: Improving on the ‘Questioning’ Indicator

In response to requests we have received from many educators, we have assembled some best practices, tips, and resources for teachers to develop their questioning skills. We asked ten superintendents to put us in touch with teachers who excel at questioning and feedback. We interviewed these teachers and synthesized their feedback. The tips below are compiled from teachers in all grand divisions across the state, and range from lower elementary teachers to high school teachers. This document also includes links to resources to support teachers in developing their questioning skills. The tips from teachers focus on five strategies teachers can employ to improve their questioning skills:

1. [Planning your questions](#)
 - a. Write out the two to three essential questions you want your students to be able to answer for each unit.
 - b. Ask the ‘Big Question’ at the start of the lesson.
 - c. Practice asking your questions out loud before the lesson.
2. [Building a classroom culture that encourages questioning](#)
 - a. Tell your students that mistakes are an opportunity to learn.
 - b. Spend a few minutes each day getting to know a student one-on-one.
 - c. Clearly set expectations for how students show respect to each other when asking and answering questions.
3. [Differentiating questions](#)
 - a. Group or partner students so that they may help each other when responding to questions.
 - b. Ask the question in a different way.
 - c. Give students time to think about their answer (a.k.a. “wait time”).
 - d. Ask all students a question, then address misunderstandings in a small group.
4. [Asking a mix of question types](#)
5. [Helping your students become good questioners](#)
 - a. Pose a student’s question back to the class to get an answer.
 - b. Begin by exploring the purpose of a question with your students.
 - c. Model your thinking process for students.
 - d. Provide opportunities for your students to practice listening.

1. Planning your questions

TIP: Write out the two to three essential questions you want your students to be able to answer for each unit.

“Before I determine which questions to ask my students, I need to know my goal for the day. What do I want students to be able to do by the end of the lesson? When I have my goal clearly in mind, then I am better equipped to think on my feet and adjust my questioning to my students’ responses, misunderstandings and questions of their own.” – Cherie Richardson, Rutherford County

“Before planning which questions to ask of students, I first review the standards I set out to teach. I research how other teachers approach the standards, and how they assess student mastery of them. It is important to begin with the end in mind. After I have planned my unit with the standards and how I will assess them, I then consider what questions I will write into the unit.

There are always two to three essential questions I want my students to be able to answer by the end of the unit. These are high level questions and encompass the overarching purpose of the unit. If students can answer the essential questions, they not only have mastered the skills in the unit, but they understand the reasoning behind the math. I recommend visiting the [National Council of Teachers of Mathematics](#) for help in crafting essential questions.

I break down the essential questions into a challenge I want students to tackle each day. I begin each daily lesson by posing a challenge or question to the class, and students will hopefully be able to answer that question by the end of the lesson.” - Adam Moss, Cleveland City

TIP: Ask the ‘Big Question’ at the start of the lesson.

“When I begin writing my unit plan and including questions, I ask myself, “What do I want students to know and be able to do?” I usually begin a daily lesson by asking students ‘the big question,’ the essential question that if students are able to answer, they understand the bigger picture of the lesson and not just the smaller skills involved.

I ask the big question first so that students know where they should end up. I work them back toward the big question throughout the lesson. I allow my students time to process the pieces of information. I give them the pieces, but they put them together on their own.” – Alicia Kahrs, Cleveland City

TIP: Practice asking your questions out loud before the lesson.

“I plan the questions I will ask prior to my lessons, and I even practice asking the questions out loud before I ask them. I try to predict how my students might respond so that I am ready with clarifying questions. This requires me to recognize my students’ varying levels of readiness and their individual needs.” – Beth Myers, Marion County

2. Building a classroom culture that encourages questioning

TIP: Tell your students that mistakes are an opportunity to learn.

“We begin on the first day of school of establishing an environment where kids feel safe asking questions. I tell my students that struggling is a part of learning and it is essential to learning. A mistake is an opportunity to grow. With this mentality, students compete to be the first one among their classmates to show their mistake. Students share their work at my podium (a.k.a. the “standing scholar’s podium”). Students show their work on our class document camera and often we will fix their mistakes as a whole class.” – Tressy Halbrook, Lauderdale County

TIP: Spend a few minutes each day getting to know a student one-on-one.

“Getting to know my students is one of the most effective things I can do to improve their ability to tackle frequent and rigorous questions in my class. I save about 5 minutes at the end of each day to hold a conference (read more about Beth’s conferences [here](#)) with an individual student. Students sign up for a conference with me, so we have a set appointment. I ask students questions about themselves and show that I care about them. I use the information I learn in our conferences to engage them later and to make them feel comfortable throughout the year. In addition to showing students I care about them, I also lay the ground work for academic discussions by teaching students ways to treat each other with respect. I frequently tell my students that they all have something to contribute to the world, and that their ideas are valuable. In addition to explicitly teaching these concepts, I also model these character traits throughout the year.” – Beth Myers, Marion County

TIP: Clearly set expectations for how students show respect to each other when asking and answering questions.

“I begin the process of establishing a culture where students feel comfortable taking risks asking and answering questions on the first day of school. I share classroom norms and discussion norms (see Alicia’s discussion norms [here](#)), and I model respectful questioning and commenting for about two to three weeks. After this point, students can successfully hold discussions and ask questions among each other. We periodically remind ourselves of our discussion norms throughout the semester. To make students comfortable in answering questions, I ask a lot of open ended questions where there may not necessarily be a right or wrong answer. I also give students resources for answering questions, such as giving them a hint where to look in their notes for the correct answer.” – Alicia Kahrs, Cleveland City

3. Differentiating questions and including all students

TIP: Group or partner students so that they may help each other when responding to questions.

“Before I ask a question, I say, ‘I’m going to ask you a question so we can have a conversation, but I’d like you to be prepared.’ I ask the question and then give students time to turn to their partner to discuss for 1 or 2 minutes, then we come back and discuss as a class. This gives confidence to the kids who don’t normally volunteer.” – Alicia Kahrs, Cleveland City

“My class is arranged into groups. Each student in each group has a responsibility to share out their group work during the week. One student presents the group work one day, another student the next, and so on. Within a week, every student has to present at least one time.” -Tressy Halbrook, Lauderdale County

TIP: Ask the question in a different way.

“One of my most effective strategies to differentiate my questioning for my students is to rephrase my question, or ask it another way, when a student is struggling.” – Tressy Halbrook, Lauderdale County

TIP: Give students time to think about their answer (a.k.a. “wait time”).

“One of the most impactful strategies I incorporate in my class is wait time. I allow a student several moments before I help him respond to the question. Furthermore, I don’t immediately respond when a student answers a question. This allows the other students in the room the time to process the response. Often times, students will respond to each other’s questions and answers, creating focused and respectful debates about science.” – Alicia Kahrs, Cleveland City

“I encourage students to spend time thinking about a question if they don’t know the answer right away. I give some students a little time to think about their response, but redirect the class’ attention so the student is not on the spot while they are thinking. I’ll say, ‘You might not have the answer right now, but I’m going to come back to you in a minute so be ready.’” – Cherie Richardson, Rutherford County

TIP: Ask all students a question, then address misunderstandings in a small group.

“I involve all students through a morning post-it system. Some mornings I will assign either a particular problem from their math homework from the previous night or I will write a question on the morning power point for the students to solve. The questions I put up refer back to the previous day’s lesson. Students answer the question on a post-it note and stick their note on their assigned spot on a poster near the door called the ‘Parking Lot’ (the poster has a spot for each student with their number on it).

I quickly (in 1-2 minutes) review the student responses on the poster. If the student got the answer correct, I’ll throw out their post-it. If a student missed the question, then I’ll collect those to decide how I will form my small groups for the day to meet with the students who are having the greatest difficulty with the skill (see a picture of Misty’s Parking Lot [here](#)).” – Misty Byrd, Rutherford County

4. Asking a mix of question types

“I refer to Jim Webb’s work around the depth of knowledge. He notes that there are levels of cognitive complexity: (1) recall and reproduction, (2) skills and concepts and (3) strategic thinking. This last level gives students the freedom to make an argument. In my 2nd grade classroom, this might look like a student saying, ‘I disagree with you about how the character feels. I think he feels excited because he said he had not seen his mom in two weeks and she is coming home today.’ I ask questions at all levels, but I eventually want to focus the bulk of my questioning around strategic thinking. We keep a poster in our class of Webb’s depth of knowledge levels, which both my students and I regularly refer to when having a class discussion.” – Beth Myers, Marion County

“Asking open ended questions to start a lesson or introduce a new concept is a strategy I frequently use. For example, when starting a unit on fractions, I might display a fraction on a number line and in a picture format, and ask students, ‘Are you wondering anything about this?’ For a reading lesson, I might provide a picture with no words to get students answering and asking questions.” – Tressy Halbrook, Lauderdale County

5. Helping your students become good questioners

TIP: Pose a student's question back to the class to get an answer.

“Our class has a conversational structure. Rather than giving a student an answer right away, I pose their question back to the class. This gives students an opportunity to learn from each other, and to challenge the higher achieving students to answer the toughest questions. Some strategies I use to strengthen student understanding through questioning include asking students to take on the role of the teacher (what would they ask their peer who is solving a problem?), and after a student solves a problem, I ask the student to make up a question to ask me about the problem.” – Adam Moss, Cleveland City

TIP: Begin by exploring the purpose of a question with your students.

“My second graders are able to ask and answer high-level questions and engage in debate as a class; however, I laid a lot of ground work to get to this place. I began the year by asking, ‘What is a question?’ We considered what questions require of us, what they sound like and what purpose they serve. For example, we noticed that questions often include words like, ‘what, when, where and why.’ The students formed their own questions out loud, and in writing. After about six weeks of discussing and practicing out loud, we began to write our questions down.” – Beth Myers, Marion County

TIP: Model your thinking process for students.

“It’s important to model your own thinking to help students understanding of what effective questioning sounds like. Sometimes I’ll engage students in this process by saying, ‘What question do I need to ask myself now?’ I also often guide my instruction through questioning. For example, I’ll draw out students’ understanding of how to compare fractions by asking them questions. ‘What are you going to do next?’ ‘What method can you use here?’ ‘Why did you take that step?’” – Cherie Richardson, Rutherford County

TIP: Provide opportunities for your students to practice listening.

“In order for my students to be strong questioners themselves, they have to be good listeners. We practice listening with peer tutoring. Students will talk with a peer, and ask questions based on what their partner said. I ask students to stand up when they are responding to a question. This action leads the other students to look at the student speaking and helps their voice carry across the class. I might ask a student to repeat what another student said to improving our listening skills. Students always begin with the sentence stem, ‘I heard Hannah say...’” – Tressy Halbrook, Lauderdale County

'Questioning' Resources

1. [Example essential, advancing and assessing questions](#)
2. [Examples of types and levels of questions](#)
3. [Guidance on fostering student discussion and questioning](#)
4. [Question cup](#)
5. [Question stem cards](#)
6. [Student conferencing](#)
7. [Example classroom norms](#)
8. [Book and website recommendations from Tennessee teachers](#)

1. Example essential, advancing and assessing questions

Example overarching, or essential, questions, as well as example questions to ask throughout a lesson are located in the common core aligned unit plans on the TNCore.org website. Click on your subject area and grade level in the table below to access the sample unit plans. Snapshots of the questioning resources in these unit plans follow.

Math	ELA	Science	CTE
K-2	K-3		
3-5	4-5		
6-8	6-8	6-8	6-12
9-12	9-12	9-12	

Snapshot of overarching questions in the common core aligned unit plans:

Overarching Questions

Grade 5 Opinions on Space Exploration: Reading and Writing Informational Texts

- *What are the benefits and costs of space exploration according to these authors?*
- *What methods do writers use to build and support their opinions?*

Snapshot of questions to ask throughout a lesson, including assessing and advancing questions:

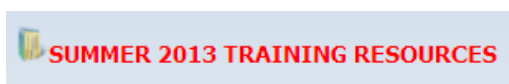
Possible Student Misconceptions	
<p>PART A: Students may be confused where points are located, mixing up the x and y coordinates. Students may not understand how to interpret the context with the graph.</p>	<p><u>Assessing Questions</u> Which is the y coordinate and which is the x coordinate? What is happening in this problem – what does the graph show?</p> <p><u>Advancing Questions</u> Look at the axes. What does each point on the graph represent? Can you tell me why the graph goes “down”?</p>
<p>PART B: Students may not know how to compare which person can download faster by abstracting appropriate values from the graph and/or table.</p>	<p><u>Assessing Questions</u> How long did it take Marie to download the album? Do you know how long it took Scott? How can we compare?</p> <p><u>Advancing Questions</u> How can you figure out how long it took Marie to download one song? Scott?</p>
<p>PART C: Students may not understand that when comparing songs each can download and time, they are both proportional relationships.</p>	<p><u>Assessing Questions</u> We know who can download one song faster. Does that tell you who can download 30 songs faster? How would you describe the relationship between time and the number of songs Marie and Scott can download?</p>

2. Examples of types of questions

Knowledge and Comprehension	Application and Analysis	Creation and Evaluation
<ul style="list-style-type: none"> • What is the setting of the story? • What are the parts of a cell? 	<ul style="list-style-type: none"> • If ... had happened, what might the ending have been? • How is the structure and function of an animal cell similar to a city or school? 	<ul style="list-style-type: none"> • Do you agree with the choices the main character made? • How are plant and animals cells organized to carry on the processes of life?

3. Guidance on fostering student discussion and questioning

Resources for asking assessing and advancing questions, as well as creating a classroom that supports student discussion can be found in the common core summer training tools at www.TNCore.org. Click on “Curricular Resources” then click on your grade level. Next, click on the “Summer 2013 Training Resources” link.



4. Question Cup

Each student’s name is written on a popsicle stick and then a stick is chosen when the teacher needs someone to answer a question. One way to make this strategy more impactful is to color code your popsicle sticks by ability level. Using data, you can group your students into different color categories and color the popsicle sticks accordingly. That way when you have a question that may be at a lower level of Bloom’s, you can choose, for example, one of your yellow sticks to allow one of your lower level students to build their confidence at answering questions and increase their participation level.



5. Question Stem Cards



This strategy allows students to drive the questioning process. One way this can be done is to print out bookmark sized cards with question stems on them at each level. You can print them [See pgs. 11-12] on cardstock, laminate them and then punch a hole in the corner so they can be put on a ring. You can then have students pull out the cards and ask questions to each other or the class as a whole. For example, you may ask each student to pick a question from the pink card to ask a partner. This increases accountable talk between students and allows you to easily differentiate based on ability level (Ex. “I would like row one to formulate and answer one pink question, one blue question, and two yellow questions. I would like row three to formulate and answer two pink questions and three orange questions.”).

6. Student Conference Time, Beth Myers, 2nd grade teacher

In my classroom, I have “conference” time at the end of the day. I usually take about 5 minutes and schedule the students ahead of time. I try to work in about 4 students a day so that during the week, every student has a space at least once. I tell them that this is our time to discuss whatever they want to discuss, as well as answer a few questions. I make it a point to listen intently, as during our relationship groundwork, I have made them aware of certain “rules” when talking and listening. I want them to get used to communicating, and being respectful of the other person by looking at them, making eye contact and listening.

I ask questions to prompt further thinking, especially if it is a topic that yields to a productive discussion. For example, last week, I had a student tell me that her hamster had died. I asked the obvious, “How did you feel when that happened?” but soon the questions segued into “Can you tell me about a fun time you had with your hamster?” Her answer: “I remember when I took him out of his cage and he ran around the kitchen and scared my mom.” This student had used a thinking stem (I remember when), and made a connection. I also asked, “What advice would you give someone getting a hamster?” Answer: “I would tell them that hamsters don’t live as long as dogs.”

The students are well practiced at repeating the question in their answer. For example if I ask, “Have you done something exciting lately?” they begin their response with, “Something exciting I have done lately is...”. I have noticed when they repeat the question, they seem to gain more confidence in their answers. Other questions I typically ask:

- What is your favorite day of the week? Why?
- If you could change something about second grade, what would it be?
- Can you make a prediction about what we may learn more about in the next few weeks?
- What would you like to do more of during our school day? (I steer them to keep their answers focused on the curriculum, such as “I would like to more writing every day.”)

7. Classroom Norms, by Alicia Kahrs, 10th grade Biology teacher

Environment

- Be on time
- Come prepared to be a part of this community
- Be a good listener and share your voice

Learning

- Be flexible and willing to accept challenges
- Take charge of your learning
- Be an active and engaged learner

Respect

- Respect yourself, your peers, your leaders, and your school

Norms for Discussion

<p>You have the right to...</p> <ul style="list-style-type: none"> • Make a contribution to an attentive, responsive audience. • Ask questions that clarify and advance your understanding. • Be treated civilly. • Have your ideas discussed. 	<p>You are obligated to...</p> <ul style="list-style-type: none"> • Speak so that everyone can hear. • Speak one at a time. • Listen for understanding. • Agree or disagree (and explain why) in response to other people's ideas. • Critique ideas, not people.
---	---

"The Parking Lot" by Misty Byrd, 4th grade



8. Learn more! Book and website recommendations from Tennessee teachers

- High-Impact Instruction by Jim Knight
- Highly Effective Questioning by Ivan Hannel
- Teach Like a Champion by Doug Lemov
- Unmistakable Impact by Jim Knight
- Essential Questions by Jay McTighe and Grant Wiggins
- National Council of Teachers of Mathematics for help in crafting essential questions:
<http://www.nctm.org/catalog/productsview.aspx?id=129>

A huge thank you to the following teachers who shared their tips and resources with us:

Adam Moss, Arnold Elementary, Cleveland City
Alicia Kahrs, Cleveland High School, Cleveland City
Beth Myers, Monteagle Elementary, Marion County
Cherie Richardson, Smyrna Elementary, Rutherford County
Karen Wight, Williamson County Reward School Ambassador
Misty Byrd, Cedar Grove School, Rutherford County
Tressy Halbrook, Ripley Elementary, Lauderdale County

Question Cards

Remembering

What happened after...?
 How many...?
 Who was it that...?
 Can you name the...?
 Describe what happened at...?
 Who spoke to...?
 Can you tell why...?
 Find the meaning of...
 What is...?
 Which is true or false...?
 How did...happen?
 Which one...?
 When did...happen?
 How would you describe...?
 What do you recall about...?
 Who were the main...?
 How would you explain...?
 List three...
 Why did...?

Understanding

How might you write...in your own words?
 How might you write a brief outline of...?
 What do you think could have happened next...?
 Who do you think...?
 What was the main idea of...?
 Who was the key character in...?
 What strategies might you use to distinguish between...and...?
 What differences exist between...?
 Can you provide an example of what you mean...?
 How would you define...?
 What could be a reason for...?
 Which does not belong?
 What characteristics identify...?
 What patterns exist in...?
 What relationship exists between...and...?
 What can you infer from...?
 How would you generalize...?
 Will you restate...?

Applying

Do you know another instance where...?
 Could this have happened in...?
 How might you group characteristics such as...?
 What factors would you change if...?
 How might you apply the method used to some experience of your own...?
 What questions would you ask of...?
 From the information given, can you develop a set of instructions for...?
 Would this information be useful if you had a...?
 Predict what would happen if...
 Write in your own words...
 How would you explain...?
 What do you think could have happened next?
 Clarify why...

Analyzing

Which events could have happened...?
 If...happened, what might the ending have been?
 How was this similar to...?
 What was the underlying theme of...?
 What do you see as other possible outcomes?
 Why did...changes occur?
 How might you compare...with...?
 Can you explain what must have happened when...?
 How is...similar to...?
 What are some of the problems with...?
 What were some of the motives behind...?
 What was the turning point in...?
 What is the function of...?
 What evidence in the text can you find that...?
 What are the advantages and disadvantages of...?

Evaluating

Is there a better solution to...?
 Judge the value of...
 How might you defend your position about...?
 Do you think...is a good or a bad thing?
 How would you have handled...?
 What changes to...would you recommend?
 Are you a...person?
 How would you feel if...?
 How effective are...?
 What do you think about...?
 How would you prove/disprove...?
 Would it be better if...? Why/why not?
 How would you critique...?
 Was the argument convincing and what makes you think so?
 How well are the conclusions supported by the evidence?
 What would you have done if...?
 Why did...choose...?
 Based on what you know, how would you explain...?
 What information from the text would you use to support...?

Creating

Can you design a...to...?
 Can you see a possible solution to...?
 If you had access to all resources, how would you deal with...?
 Devise your own way to...
 How might you create new and unusual uses for...?
 How would you test...?
 What change would you make to solve...?
 How would you adapt...to create a different...?
 How could you change or modify the plot?
 What could be done to minimize (or maximize)...?
 Suppose you could...What would you do?
 How might you construct a model that would change...?
 How could you verify...?
 What criteria would you use to assess...?
 What data was used to evaluate...?
 What information would you use to prioritize...?