

Circle of Viewpoints

A routine for exploring perspectives.

1. Brainstorm a list of difference perspectives.
2. Choose one perspective to explore, using these sentence-starters:
 - I am thinking of ... *the topic* ... from the viewpoint of ... *the viewpoint you've chosen*
 - I think ... *describe the topic from your viewpoint. Be an actor—take on the character of your viewpoint*
 - A question I have from this viewpoint is ... *ask a question from this viewpoint*

Purpose: What kind of thinking does this routine encourage?

This routine helps students see and explore multiple perspectives. It helps them understand that different people can have different kinds of connections to the same thing, and that these different connections influence what people see and think.

Application: When and where can it be used?

The routine works well with topics and artworks that deal with complex issues. It also works well when students are having a hard time seeing other perspectives or when things seem like there are only two sides to an issue. The routine can be used to open discussions about dilemmas and other controversial issues.

Share your experience with this thinking routine on social media using the hashtags #PZThinkingRoutines and #CircleOfViewpoints.



This thinking routine was developed as part of the Visible Thinking project at Project Zero, Harvard Graduate School of Education.

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Claim, Support, Question

A routine for reasoning with evidence.

Drawing on your investigation, experience, prior knowledge, or reading:

- Make a claim about (or give an explanation for, or offer an interpretation of) the topic.
- Identify support (things you see, feel, know) for your claim.
- Ask a question related to your claim or the supports. What isn't explained?

Purpose: What kind of thinking does this routine encourage?

This routine supports reasoning by having students form claims, explanations, or interpretations and support them with evidence. Questioning claims helps students see reasoning as an ongoing process.

Application: When and where can I use it?

Statements of fact or belief are presented everywhere. This routine is designed to help students take notice of claims and thoughtfully examine them. Use the routine with any topic, work of art, piece of text, poem, etc. to invite careful reasoning and evaluation.

Launch: What are some tips for starting and using this routine?

This routine can work well for individuals, small groups, and whole groups. Begin by modeling the routine in the whole group: Identify a *claim*, ask the group for evidence that *supports* the claim, then invite students to *question* the claim or any of the evidence that has been offered to support it. As you process each step of the routine, document students' comments in a way that is accessible to all students. For example, you may want to write the claim on chart paper, then draw two columns, one for *supports* and one for *questions*.

Once students have practiced the routine in the whole group, they can use the routine individually or in small groups, documenting their responses in a journal or in a way that can be displayed within their small groups. You may want to return to the whole group discussion and invite individuals or small groups to share their claims, supports, and questions with the whole group. Leave time for the other students to respond with additional *supports* for the claim or to raise additional *questions*. If there's time, reflect on the activity: What new thoughts do students have about the topic?

Keep in mind that students are often in the habit of simply agreeing or disagreeing with claims. You might need to slow down and give students time to think as they generate *supports* and *questions* about a claim. You may need to encourage deeper thinking by asking: What are some other questions you might want to ask about this claim? Can you think of reasons why this might be true? Why might it not be true? Thoughtful questions that challenge the plausibility of a claim often lead to a deeper understanding of the topic and the reasoning process.

Share your experience with this thinking routine on social media using the hashtags #PZThinkingRoutines and #ClaimSupportQuestion.



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Compass Points

A routine for examining propositions.

1. E = Excited
What excites you about this idea or propositions? What's the upside?
2. W = Worrisome
What do you find worrisome about this idea or proposition? What's the downside?
3. N = Need to Know
What else do you need to know or find out about this idea or proposition? What additional information would help you to evaluate things?
4. S = Stance or Suggestion for Moving Forward
What is your current stance or opinion on the idea or proposition? How might you move forward in your evaluation of this idea or proposition?

Purpose: Why use this routine?

This routine helps students flesh out an idea or proposition and eventually evaluate it.

Application: When and where can I use it?

This routine works well to explore various sides and facets of a proposition or idea prior to taking a stand or expressing an opinion on it. For instance, the school may be considering the idea of a dress code, a teacher might present the class with idea of altering the room arrangement, a character in a book might be confronted with making a choice, a politician might be putting forth a new way of structuring taxes, and so on.

Launch: What are some tips for starting and using this routine?

The routine needs to be modeled with the whole group initially with responses recorded for the entire class to see. This enables students to build on each other's ideas. You might record responses using the directions of a compass to provide a visual anchor. That is, draw a compass in the center of the board and then record responses corresponding the appropriate direction: E, W, N, or S. It is generally easiest for students to begin with what is exciting or positive about the idea or proposition and then move to worrisome and need to know. Students might be asked to write down their individual stance or suggestion for moving forward after the initial group discussion. You can also ask students to make an initial judgment or evaluation of the idea or proposition before doing the compass points and then ask them how their thinking has changed after discussion using the compass points routine.

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Connect, Extend, Challenge

Consider what you have just read, seen, or heard, and then ask yourself:

- How are the ideas and information connected to what you already know?
- What new ideas did you get that broadened your thinking or extended it in different directions?
- What challenges or puzzles emerge for you?

Purpose: What kind of thinking does this routine encourage?

This routine helps students connect new ideas to those they know and encourages them to reflect upon how they have extended their thinking as a result of what they are learning about or experiencing.

Application: When and where can I use it?

Use this routine when you want students to make explicit connections to something previously learned or experienced. Since it is designed to help students process new information actively, it works well as the conclusion to lessons in which students have been reading, watching videos, or otherwise taking in new information. Another approach is to use the routine to close the discussion of a topic or unit of study in order to help students synthesize the information. Some questions you might consider in your planning: Are there connections to be made between this content and what students already know? Will students be engaging with new information that they might find challenging?

Launch: What are some tips for starting and using this routine?

This routine works well with the whole class, in small groups, or individually. If you are using it in a group discussion, ask students to share their thoughts. As you process each step of the routine, document their comments either in a public space for all to see or in your own notes. If students are working individually, they could document their responses in a journal or in a way that can be displayed in class.

Share your experience with this thinking routine on social media using the hashtags #PZThinkingRoutines and #ConnectExtendChallenge.



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I Used to Think... Now I think...

Think about what you have learned about the topic we have been studying and complete the following sentence stems:

I used to think...

Now I think...

Purpose: What kind of thinking does this routine encourage?

This routine helps students to reflect on their thinking about a topic or issue and explore how and why their thinking has changed. It helps consolidate new learning.

Application: When and where can I use it?

This routine can be used whenever students' initial thoughts, opinions, or beliefs are likely to have changed as a result of a learning experience. This may be after reading new information, watching a film, listening to a speaker, experiencing something new, having a class discussion, at the end of a unit of study, and so on.

Launch: What are some tips for starting and using this routine?

Explain to students that the purpose of this activity is to help them reflect on their thinking about the topic and to identify how their ideas have changed over time. Here's a possible approach for using the routine:

"When we began our study of _____, you had some initial ideas about it. Take a minute to remember what ideas you previously had about _____. Write a few sentences using the sentence starter, "I used to think..."

"Now, think about how your ideas about _____ have changed as a result of what we've been studying/doing/discussing. Again, in just a few sentences, write down what you now think about _____. Start your sentences with, 'Now, I think...'"

Have students share and explain their shifts in thinking. When you first begin using this routine, it is often helpful to do it as a whole group so that you can probe students' thinking to help them explain it in more depth. Once students become accustomed to explaining their thinking, students can share with one another in small groups and pairs.

Share your experience with this thinking routine on social media using the hashtags #PZThinkingRoutines and #IUsedToThinkNowIThink.



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See, Think, Wonder

What do you see?

What do you think about that?

What does it make you wonder?

Purpose: What kind of thinking does this routine encourage?

This routine encourages students to make careful observations and thoughtful interpretations. It helps stimulate curiosity and sets the stage for inquiry.

Application: When and where can I use it?

Use this routine when you want students to think carefully about why something looks the way it does or is the way it is. Use the routine with a relevant object (such as an artwork, image, artifact, chart, video, etc.) at the beginning of a new unit to motivate student interest, or try it with an object that connects to a topic during the unit of study. Consider using the routine with an interesting object near the end of a unit to encourage students to further apply their knowledge and ideas.

Launch: What are some tips for starting and using this routine?

Once you present the object to your students, give them time to observe it. It may be useful to explain that they are first going to describe exactly what they see, not what they think they see. In the second step when students describe what they think about what they're seeing, you could ask them follow-up questions like, "What else is going on here?" or "What do you see that makes you say that?" These questions help move students away from giving unsupported opinions encouraging them instead to use evidence to explain their thoughts. In the third step, help students articulate what they are wondering by asking them what questions remain for them.

The routine generally works well in a group discussion. You may want to document the students' responses and post them in a place where all students can see them to encourage future consideration. When doing this as a group, you may want to ask students to try the routine quietly on their own first (perhaps documenting their own thinking in writing) before discussing in a group.

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Think, Pair, Share (Adapted)

Pose a question to students. Give students a few minutes to **think**.
Invite students to **pair** with a nearby student to **share** their thoughts.

Purpose: *What kind of thinking does this routine encourage?*

This routine promotes understanding through active reasoning and explanation. Because students listen to and share ideas with others, it also encourages students to understand multiple perspectives.

Application: *When and where can I use it?*

This routine can be used when it would help for students to process their thinking aloud with another student. For example, you may ask students to Think, Pair, Share before starting a science experiment, in the middle of solving a math problem, after reading a passage of a book, etc. Sharing can also be done in small groups.

Launch: *What are some tips for starting and using this routine?*

When first introducing the routine, you may want to remind students to take turns, listen carefully, and ask clarifying questions of each other. One way to encourage students to listen actively to each other is to tell them that when they have completed their conversations, you will ask some students to explain their partner's thinking. Encourage students to make their thinking visible by asking them to write or draw their ideas before and/or after sharing (perhaps in a journal). You may also want to document students' ideas and display them in the learning space. Sometimes it is useful to have pairs or groups summarize their ideas for the whole class.

Share your experience with this thinking routine on social media using the hashtags #PZThinkingRoutines and #ThinkPairShare.



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Think, Puzzle, Explore

A routine that sets the stage for deeper inquiry.

What do you think you know about this topic?

What questions or puzzles do you have about this topic?

How might you explore your puzzles about this topic?

Purpose: What kind of thinking does this routine encourage?

This routine activates prior knowledge, generates ideas and curiosity, and prepares students for deeper inquiry.

Application: When and where can I use it?

This routine works especially well when introducing a new topic, concept, or theme in the classroom. It helps students recall what they already think they know about the topic and then invites them to identify puzzling questions or areas of interest to pursue. This routine can help you gauge students' current understanding of a topic and inform your subsequent lesson planning. You might return to this thinking routine throughout the study of a topic to surface changes in student conceptions.

Launch: What are some tips for starting and using this routine?

With each question in the routine, give students adequate time to think about and identify their ideas. You may want to have students write down their individual responses to the routine before sharing them with others. Students could document their responses in a journal.

The routine can be used to engage a class at the beginning of a new topic or unit. At first, students may list seemingly simplistic ideas and questions. It also is common for students to have misconceptions about the topic. As you're documenting students' responses, be sure to list these initial conceptions so all ideas are available for reconsideration after further study. Encourage students to think about things that are truly puzzling or interesting to them.

At times, you may want to use some of the questions in the routine by themselves. For example, you can use the *think* section of the routine at the end of a unit as a reflective tool. You may also want to use the *puzzle* section of the routine to remind students that there will always be more to learn about a topic and that learning is a continual process.

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What Makes You Say That? (Adapted)

What's going on?

What do you see that makes you say that?

Purpose: What kind of thinking does this routine encourage?

This routine cultivates observation, description, explanation-building, and evidence-based reasoning. Because students share their interpretations, they are encouraged to see multiple perspectives.

Application: When and where can I use it?

Use this routine when you want students to look closely at something and uncover their reasoning about the way it works, how it came to be, or why it is the way it is. For example, you can use this routine when students are looking at works of art or historical artifacts, reading poetry, making scientific observations and hypotheses, or delving into broad conceptual topics like culture, change, or creativity. It also is useful for gathering information on students' prior understandings when introducing a new topic.

Launch: What are some tips for starting and using this routine?

To use this routine effectively, it is important to pay attention to the flow of classroom discussion, considering where in that flow the routine could help students expound on their reasoning. For example, listen for students giving opinions, making assumptions, or offering interpretations about a topic and consider inserting the question, *What makes you say that?* As you are planning lessons, you also may be able to anticipate the moments when using this routine will deepen the discussion and help students explore what's underneath their thoughts and assertions.

Asking *What makes you say that?* models for students the type of thinking that you want them to develop. Over time, students may internalize the routine and begin to support their interpretations with evidence without being asked.

Document student responses in a way that maintains the flow of the conversation. Consider recording class discussions, keeping an ongoing list of explanations, or asking students to document their thinking through sketches, drawings, models, or writing. This documentation can be displayed and revisited in the classroom, helping you as well as the students to see the development of their thinking.

Share your experience with this thinking routine on social media using the hashtags #PZThinkingRoutines and #WhatMakesYouSayThat.



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