A THINKING ROUTINE FROM PROJECT ZERO, HARVARD GRADUATE SCHOOL OF EDUCATION

Hotspots

A routine for noticing truth occasions.

Key Prompts:

- 1. Identify a topic or situation. Is this idea clearly true, or false, or where between the two?
- 2. What makes it so uncertain? (or almost certainly true or false)
- 3. How important is it? What makes it important? (important or not so important)

Purpose: What kind of thinking does this routine encourage?

A key part of thinking is spotting situations that need more thought, and where more thought is worthwhile. This spotting routine asks learners to spot "thinking hotspots" about truth within a topic or situation that might be worth more attention. It thus helps them to be more alert to truth hotspots in the future. Also, asking "What makes this idea this way?" draws from learners characteristics that make an idea more or less uncertain and more or less important. This greater awareness helps them to spot truth hotspots in the future.

Application: When and where can I use it?

Spotting truth hotspots can be used on almost any topic or situation. It can be used to introduce a topic, to draw out students' initial thoughts. It can be used to review a topic, to look back at something students have studied, in the middle of a topic to take stock. It can be used to get students started on identifying projects or identifying issues for discussion in small groups or to launch a whole-class discussion.

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

The spotting hotspots routine is best used for a topic or situation where students have some knowledge already. They may not have studied it formally, but at least they have some common knowledge. Otherwise, almost everything would come out "uncertain" and with little basis for judging its importance. Younger children may respond better to concrete situations, like a playground fight or an event in the news, than to abstract topics like nuclear energy. This routine makes thinking visible by helping students to see thinking opportunities— "thinking hotspots"—in situations. In particular, it helps students become more alert to situations where they might think more deeply about the truth of something. Here are the key steps to the routine:

- 1. Teacher or student identifies a topic or situation.
- 2. Students identify ideas about the topic or situation as clearly TRUE, clearly FALSE, or uncertain and somewhere in the middle. And as more or less important to figure out.

Continued on the next page.

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

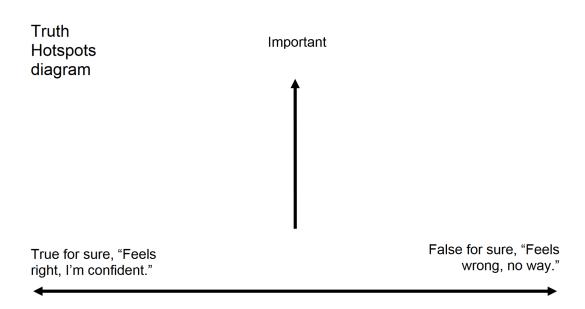




This thinking routine was developed as part of the Visible Thinking project at Project Zero, Harvard Graduate School of Education.

Hotspots, cont'd

- 3. Place ideas on a continuum. First, decide where to place the idea on the continuum between true and false. Then use a vertical axis to indicate importance, according to the student's judgment (see simple chart below). The teacher asks something like, "What makes this idea this way?" and draws out characteristics that put an idea "in the middle" rather than plainly true or false or make it important or not so important. The teacher does all this for several ideas from the class.
- 4. NOTE: Some students may reveal misinformation or misunderstandings at this stage. As with other thinking routines, while the students are thinking together it is <u>not</u> your role to correct them. Students may correct misinformation or misunderstandings themselves during the discussion or as they pursue a topic in the last step, or you may provide better information upon coming back to the topic later. Right now, you are functioning as a facilitator, not a source of information.
- 5. Teacher and students discuss disagreements about true-false and importance and place ideas on the chart, in more than one place if necessary. You do not have to resolve these disagreements, just acknowledge them. The goal is to raise consciousness of uncertainty and the reasons for it. Some disagreements may get resolved in the last step.
- 6. If the chart is lopsided, say with only some uncertain ideas in the middle or only important ideas, the teacher prompts to fill out the chart a little more. Example: "What are some ideas we are sure of?"
- 7. Teacher and students select "thinking hotspots" to investigate further, maybe right away or maybe later, perhaps using other routines.



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





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