

Selecting a Thinking Routine

A menu of routines for facilitating knowledge-building conversations

You can find the routines at www.pz.harvard.edu/thinking-routines

Exploring ideas

- ▷ **See-Think-Wonder:** Encourages learners to make careful and thoughtful observations and sets the stage for inquiry.
- ▷ **Think, Puzzle, Explore:** Activates prior knowledge, generates ideas and curiosity, and sets the stage for deeper inquiry.
- ▷ **Chalk Talk:** Helps learners consider ideas, questions, or problems by silently writing responses to a prompt and making connections to the responses of others.
- ▷ **Compass Points:** Helps learners explore various sides of a proposition or idea before expressing an opinion about it.
- ▷ **Question Starts:** Gives learners practice developing good questions.

Synthesizing ideas

- ▷ **Headlines:** Helps learners capture the essence of an idea, topic, discussion, or event.
- ▷ **Color-Symbol-Image:** Aids learners in distilling the essence of ideas nonverbally.
- ▷ **Generate-Sort-Connect-Elaborate:** Helps learners organize their understanding of a topic through concept mapping.
- ▷ **Connect-Extend-Challenge:** Helps learners connect new ideas to prior knowledge.
- ▷ **I used to think... Now I think...:** Assists learners in reflecting on how and why their thinking has changed.

Digging deeper

- ▷ **What Makes You Say That?:** Promotes evidence-based reasoning by asking learners to share their interpretations.
- ▷ **Circle of Viewpoints:** Facilitates exploring diverse perspectives.
- ▷ **Step In - Step Out - Step Back:** Promotes developing a disposition to take social and cultural perspectives responsibly.
- ▷ **Word-Phrase-Sentence:** Helps learners capture the essence of a text.



Other

- ▶ **Think-Pair-Share:** Promotes learners' understanding through active reasoning and explanation.
- ▶ **The 3 Whys:** Develops learners' intrinsic motivation to investigate a topic by uncovering its significance in different contexts.
- ▶ **Circles of Action:** Supports learners to move beyond understanding and take action.
- ▶ **Me-You-Space-Time (MYST):** Helps teachers prepare for making thinking visible.
- ▶ **Ladder of Feedback:** Supports learners in giving and receiving feedback.

Tips for Using This Tool

- ▶ The routines are designed to foster students' content knowledge and thinking skills and dispositions across subjects. They can be used repeatedly to help learners build knowledge as they exchange, build on, or disagree with one another's ideas.
- ▶ Your learning goals should drive the use of thinking routines, rather than the other way around.
- ▶ The routines are intended to become one of the regular ways that students go about the process of learning in the classroom, rather than "another thing to do."
- ▶ Use a small number of routines consistently, rather than multiple routines once or twice, so they become part of learners' thinking patterns.
- ▶ Choosing which material to use with a thinking routine is as important as choosing which routine to use.
- ▶ Many of the routines are best carried out in a group. Even if a routine can be completed individually, it is useful to share individual responses in a small or large group.
- ▶ Routines can be carried out in person or virtually. Online, students might post thoughts in Padlet or Jamboard so they can review classmates' thoughts and discuss implications.
- ▶ Most of the routines exist in both English and Spanish.
- ▶ See www.pz.harvard.edu/thinking-routines for additional routines. PZ routines include ways to explore objects and systems, works of art and music, possibilities and analogies, perspective-taking, controversies and dilemmas, and global thinking.

Notes

- ▶ These **Thinking routines** were mainly developed by Project Zero researchers.
- ▶ **Chalk Talk** is adapted from Hilton Smith of the Foxfire Fund.
- ▶ **Think-Pair-Share** is adapted from: Lyman, F. T. (1981). "The Responsive Classroom Discussion: The Inclusion of All Students," in A. Anderson (Ed.), *Mainstreaming Digest* (pp. 109-113). College Park: University of Maryland Press.