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

3-2-1 Bridge

A routine for organizing one's understanding of a topic through concept mapping.

Your initial responses to the topic	Your new responses to the topic
3 Thoughts / Ideas	3 Thoughts / Ideas
2 Questions	2 Questions
1 Analogy	1 Analogy
Bridge: Explain how your new responses connect to your initial response?	

Purpose: What kind of thinking does this routine encourage?

This routine activates prior knowledge and helps to generate ideas about a topic. It also facilitates making connections among ideas. Concept maps help to uncover students' mental models of a topic in a non-linear way.

Application: When and where can I use it?

This routine can be useful as a pre-assessment before the beginning of a unit of study if students already have a lot of background information about the topic. Conversely, it can also be useful as a post or ongoing assessment to see whatstudents are remembering and how they are connecting ideas. Individual maps can be used as the basis for construction of a whole classroom map. Maps can also be done progressively, with students adding to their maps each week of the unit.

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

Depending on how much familiarity students have with concept maps, you may need to demonstrate making a concept map using this routine with the whole class. However, if students are relatively familiar with the idea of concept maps, you can launch right into the routine explaining that students will be making concept maps but in a structured way. Give time for students to complete each step of the routine before moving on to the next step. It isn't necessary that students generate an exhaustive list of all their ideas initially, but make sure they have time to generate a rich and varied list before moving on. Tell students that at any point they can add new ideas to their list and incorporate them into their map. If you are adding to a map over time, you might want to have students use a different color pencil each time they make additions. Explaining and discussing maps with partners helps students to consolidate their thinking and gain other perspectives.

Share your experience with this thinking routine on social media using the hashtags **#PZThinkingRoutines** and **#321Bridge**.







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

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