

## THINKING ROUTINES: Overview & Teaching Tips

### Japanese American Incarceration during World War II: Analyzing Primary Source Materials using Thinking Routines

Densho: The Japanese American Legacy Project worked with Ron Ritchhart, director of Harvard's *Visible Thinking Project* in 2011, to develop ways to engage teachers and their students in learning the story of the incarceration of Japanese Americans during World War II. The result of this inquiry connects primary source materials from the Densho archives with "thinking routines" to promote analysis of this American story.

#### **What are thinking routines and how do they work?**

Good teachers know how to get their students to think. Researchers at Harvard's *Visible Thinking Project* wanted to know just how good teachers go about doing this. They observed these teachers at work in the classroom and found that they take a very systematic approach to getting their students to think, and they repeat it again and again with all kinds of content. The researchers took these practices, and developed them into "thinking routines," simple recipes for getting students to think.

Just how do thinking routines promote student learning? "Well, one of the things I like to say is a quote from David Perkins, which comes from his book, *Smart Schools* — 'Learning is a consequence of thinking', comments Ron Ritchhart. He goes on to note, "If we're more aware of the kind of thinking we want students to do, then that thinking is going to lead to developing understanding and developing the kind of learning outcomes we're after."

The researchers found that the kind of thinking routine that a teacher uses depends on the kind of thinking that they want their students to develop. So, one thinking routine is used to get students to observe carefully, while another emphasizes metaphorical thinking, and yet another develops thinking about multiple viewpoints on an issue.

To date, the *Visible Thinking Project* has developed around 30 different thinking routines. They are simple to use in the classroom because they have very few steps, which makes them easy to remember. They are goal oriented, targeting specific thinking skills. Ritchhart points out that another way to think about thinking routines is that each is a pattern. "It's a pattern that you develop. Are there questions you routinely ask over and over again as your kids are exploring that content? Is there a way you structure the exploration of ideas?" Ritchhart notes that the real power of these instructional patterns is to make them explicit, which extends their use beyond the classroom, "And by making them (thinking routines) explicit, we turn them from a teaching strategy into a strategy for learning that students can then use as tools in their own learning."

More information about thinking routines can be found at [pz.harvard.edu/vt](http://pz.harvard.edu/vt) and in *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for All Learners*, by Ron Ritchhart, Karin Morrison and Mark Church, published by Jossey-Bass, 2011.

## THINKING ROUTINES: Overview & Teaching Tips

### Thinking Routines Matrix

Routine	Key Thinking Moves	Historical Thinking	Notes
<b>FOR INTRODUCING &amp; EXPLORING IDEAS</b>			
Zoom In	<ul style="list-style-type: none"> <li>Description</li> <li>Inference</li> <li>Interpretation</li> </ul>	<ul style="list-style-type: none"> <li>Describe what's there</li> <li>Build explanations</li> <li>Reason with evidence</li> </ul>	A variation of See-Think-Wonder involving using only portions of an image.
Explanation Game	<ul style="list-style-type: none"> <li>Observe details</li> <li>Build explanations</li> </ul>	<ul style="list-style-type: none"> <li>Wonder</li> <li>Make connections</li> <li>Build explanations</li> </ul>	Focuses on explaining a part and how it connects to the whole.
<b>FOR SYNTHESIZING &amp; ORGANIZING IDEAS</b>			
CSI: Color, Symbol, Image	<ul style="list-style-type: none"> <li>Capturing the heart through metaphors</li> </ul>	<ul style="list-style-type: none"> <li>Capture the heart and form conclusions</li> </ul>	A non-verbal routine that forces visual connections.
I used to think . . .	<ul style="list-style-type: none"> <li>Reflection</li> <li>Metacognition</li> </ul>	<ul style="list-style-type: none"> <li>Make connections</li> </ul>	Used to help learners reflect on how their thinking has shifted and changed over time.
<b>FOR DIGGING DEEPER INTO IDEAS</b>			
Tug for Truth	<ul style="list-style-type: none"> <li>Perspective taking</li> <li>Reasoning</li> <li>Identifying complexities</li> </ul>	<ul style="list-style-type: none"> <li>Consider different viewpoints</li> <li>Build explanations</li> <li>Uncover complexity</li> <li>Reason with evidence</li> </ul>	Building understanding of a controversial issue based on the examination of multiple perspectives.
Claim Support Question	<ul style="list-style-type: none"> <li>Identify generalizations</li> <li>Reason with evidence</li> </ul>	<ul style="list-style-type: none"> <li>Reason with evidence</li> <li>Counter arguments</li> </ul>	Can be used with text or as a structure for mathematical and scientific thinking.
Sentence-Phrase-Word	<ul style="list-style-type: none"> <li>Summarizing</li> <li>Distilling</li> </ul>	<ul style="list-style-type: none"> <li>Capture the heart and form conclusions</li> </ul>	Text-based protocol aimed at eliciting what a reader found important or worthwhile. Used with discussion to look at themes and implications.

Adapted from "Thinking Routines Matrix" in *Making Thinking Visible* by Ritchhart, Morrison & Church, 2011.

### Teaching Tips for Facilitating with Thinking Routines

In our experience working with thinking routines for over 10 years, we've found they're a great way to prompt learning, however they require an active presence on the teacher's part. Here are a few tips you may find useful.

- Observe student work closely, listen carefully, stay open and flexible in your thinking.

## THINKING ROUTINES: Overview & Teaching Tips

- When listening to students or reviewing their writing, avoid making assumptions, or jumping to conclusions. Instead, probe students to get them to clarify and reveal their thinking. Seek to understand the reasoning that each student presents.
- “What makes you say that?” is a great question to get students to clarify their thinking.
- Try to stay neutral on any issue – strive to get students to develop their own ideas.
- When offering praise, give it for student effort – like thinking that reasons with evidence, instead of for a “right” answer.
- Pause to think before answering student questions (unless they are purely procedural). Consider offering a question that can serve to further their thinking versus giving a definitive answer. However, avoid “leading” questions.
- Confront student misconceptions by referring them to other source material, pose a question that challenges their position, or perhaps encourage them to do more research.