

PROJECT PATH	THINKING ROUTINE	BRIEF ROUTINE OVERVIEW	EXAMPLE OF HOW TEACHERS HAVE USED ROUTINE IN PBL
LAUNCH	See Think Wonder	<i>Introducing / Exploring Ideas</i> Ideal for inquiry-based, close observations of photos, text, artwork, or other stimuli	<i>Entry event & need to know list.</i> Kindergarten teacher used artwork by a children's illustrator connecting to driving question.
	Zoom In	<i>Introducing / Exploring Ideas</i> Close examination of a portion of an image to build a deeper understanding	<i>Entry event & need to know list.</i> 6th grade teacher used an historic photograph of the Holocaust to generate questions.
	Think Puzzle Explore	<i>Introducing / Exploring Ideas</i> Identifies current understanding, promotes curiosity, and allows for exploration of unknown questions	<i>Generating questions for NTK list and developing a plan</i> Middle school students initially did "Think" and "Puzzle" part to reflect and ask questions about citizenship and immigration. Then after teams and project were introduced, began "Explore" part of routine.
	Generate Sort Connect Elaborate	<i>Synthesizing/ Organizing Ideas</i> Highlights one's understanding of a topic in a nonlinear way	<i>Generating questions for need to know list</i> After entry event, 3 rd grade teacher introduced concept of "economics" in Depression Era, making connections to read aloud
BUILD KNOWLEDGE	+1 Routine	<i>Engaging Reflection</i> Identifying key ideas and committing them to memory	<i>Synthesizing new information</i> High school biology teacher used this routine after a guest scientist from the university spoke
	Sentence-Phrase-Word	<i>Digging Deeper into Ideas</i> Text-based routine to identify what was important or meaningful	<i>Text comprehension and group discussion</i> 2 nd grade teacher used informational text about habitats. Each student team had a different habitat to discuss. Used with Micro-lab Protocol.
	Micro-lab Protocol	<i>Synthesizing & Organizing Ideas</i> Equal participation in a conversation that ensure everyone contributes	<i>Collaboration and team dynamics</i> Teachers use this protocol with other routines to help facilitate equitable discussions and opportunities for all voices to be heard. This is great to use as a way to provide critique as well.
	The 4Cs	<i>Synthesizing / Organizing Ideas</i> Text-based discussion that identifies key concepts in the text	<i>Text comprehension and group discussion</i> 5 th grade teacher used informational texts about colonial times with all 4Cs. Used with Micro-lab Protocol. 1 st grade teacher differentiated and started with 1 or 2 C's in whole group.
DEVELOP AND CRITIQUE	What Makes You Say That?	<i>Digging Deeper into Ideas</i> A question that teachers can weave into discussion to push students to give evidence for their assertions	<i>Feedback from peers and other student teams</i> Teachers and students used this routine to help provide additional evidence with given feedback. 3 rd grade teacher used two column table titled "feedback" and "what makes me say that."
	Chalk Talk	<i>Introducing / Exploring Ideas</i> Silent discussion on paper that invites all students to be active members of the learning process	<i>Feedback from peers and other student teams</i> Team chose an area that they wanted to critique and wrote a question at the center of the chalk talk. Other teams had a "silent" discussion about the question, giving suggestions and asking more probing questions.
PRESENT	I used to think.... Now I think	<i>Synthesizing / Organizing Ideas</i> A self-reflection tool to examine how one's thinking has changed or shifted over time	<i>Reflection and metacognition</i> Teachers used this routine after presentation day as a final reflection. Some teachers also include "What changed my thinking" to the routine in order to encourage students to provide evidence of their learning. Many teachers use this routine throughout the project as exit ticket and formative assessment.

*Source: *Making Thinking Visible* by Ron Ritchhart, Mark Church, Karin Morrison. **Chart created by Myla Lee.