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