

Methods for Reflection

Method	Notes
	<i>Reflection is an integral part of the project. Prepare for reflection by using Gallery Walks, portfolios, and performance-based rubrics throughout the project. Reflection is both an individual and collective exercise. For teams, begin by reviewing norms for listening, attentiveness, and contribution. Encourage 'I like, I wonder,' format. Provide prompts from the Reflection Matrix.</i>
Think-Pair-Share	Brainstorm knowledge gained from the project individually and then share with a partner. Create a joint list. Post lists. Give all students five colored dots and have them walk the room to look at lists. Place dots on five ideas that most interest them. Discuss the reason that the lists appealed.
Four Corners	Post one interesting outcome of the project in each corner of the room. Have students move to the corner that interests them. Discuss issues in each corner. Move to other corners if appropriate. Use chart paper divided into quadrants for students to defend their corner.
Expert Line	Reflect on the research stage of the project by dividing the class into researchers and consultants. Have students face each other in a line. Use a timed consultation to both receive problems and consultation. Switch roles. Debrief as a group.
Think Tank	Individual students complete a self-assessment on presentations. Discuss in teams. As a whole, create a presentation tip sheet.
Question Builder Chart	After culminating presentations, use teams to build a chart of new questions to ask. Use <i>Who, What, When, Where, How, Why, and Which</i> paired to <i>is, did, can, would, will, might</i> verbs.
Question Storming	After presentations, have students record 5 to 6 questions on sticky notes. Share question in teams. Post in categories. Complete a Gallery Walk. Discuss.
Self Question	Create a self-assessment form for students. Share in teams or in group.
Six Thinking Hats	Reflect on the project results by having students choose one of the six thinking hats (<i>blue—global thinking; back—critic; red—hunches, intuition; white—facts and figures; green—creative ideas; yellow—logical, positive</i>). Analyze the results through the lens of each hat.
Stretch Your Thinking	Set up a reflection activity based on Bloom's Taxonomy, or similar comparisons of levels of learning.
Interact with an Expert	Use individuals or teams to interview or videoconference with an expert. Review and debrief project. Share findings with class.
That's Good, That's bad	Use a Good-Bad organizer to review project tasks, environment, methods, teams, etc.
Pose a New Problem	Have students take findings from the project and create a new problem using the findings.
Web Excursion	Have students use sticky notes to create a wall web of all resources, personnel, tools, and technologies they used to complete the project. Discuss the wall web.
Begin with a Poll	Use Wiggio or Poll Everywhere to use email or cell phones for instant polling on questions about the project.

Writing	Create a class wiki or blog. Have students post, then share as a whole.
Create Visuals	Give students specific guidelines for creating a visual to ensure they create a particular message and supporting ideas. Have them create a timeline, chart, flowchart, graph, collage, or cartoon to depict the project results.
Create a Skit	Have students select a key artifact from the project and create a short dramatization around it.
Use Videos and Photos	Use video or photos to broadcast the main message of the project.
Play in the Sandbox	Use play by having students imagine they a reign over a sandbox. What does the learning smell like? Taste like? Are there colors?
Critical Friends Protocol	For a more formal debrief on a project plan, put students in a critical friends circle and facilitate a protocol on the project. See the Critical Friends Protocol .
Fishbowl	Use a simple fishbowl format to discuss the project. Use a small circle with an empty seat. Circle the remaining students in a circle outside the fishbowl and allow one student at a time to join the inner circle for a comment.

* Thanks to *Big Think*, by David Loertscher, Carol Koechlin, and Sandi Zwaan, and other sources.