

Slow Complexity Capture - Find, Capture, Explain, Wonder

A routine for slowing down to look closely at complexity.

Find: Find an object or scene that captures your eye. In a word or phrase, say what it is.

Capture: Take some time to look carefully at your item. Capture it by slowly making a drawing of it or taking pictures of it from different angles or perspectives. Don't worry about creating a 'good' or realistic drawing or picture. The goal is to use drawing or picture-taking to help you look closely and notice details. Spend at least 5-10 minutes observing through drawing, looking, and/or photographing.

Explain: After you have visually captured your item, write a paragraph (or tell a friend) about how it is complex.

Wonder: What new ideas and questions do you have about your item?

Purpose: *What kind of thinking does this routine encourage?*

The routine helps students slow down and use the medium of drawing or photography as a tool for looking closely. By taking time to make extended observations, students will begin to see the complexity inherent in the design, composition and constitution of even everyday objects and scenes.

Application: *When and where can I use it?*

The routine mainly emphasizes the complexity of parts and interactions, but it may also help student see other kinds of complexity.

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

If students are uncomfortable with drawing, emphasize that the purpose of the routine is to help students make careful observations, not to produce polished work. If students don't know where to start, offer some simple strategies or techniques. For example, create a grid of 4 or 6 squares and ask students to fill in each square with a quick sketch. Or have students make a contour drawing by drawing the outlines of something without lifting their pencil from the paper—and perhaps by looking only at the object, not at the drawing or their hand.

The routine can also be varied. Students can capture an object or item from several different perspectives (as in the picture above); they can focus in on a single aspect of something and capture it in careful detail; they can make a rough sketch of an entire scene; they can make multiple sketches of the same scene. Additionally, students can vary their work configurations. For example, they can work in pairs, or small groups in which each person creates a capture of the same item from a different angle or perspective. Then they share their captures with one another, discuss them, and together describe the way in which their item is complex.

When responding to student work, emphasize the observational qualities of students' drawing, rather than their technical qualities. Support students' explanations of complexity by using language and ideas from the 'Ways Things Can be Complex' page. Support their wonderings by appreciating the many different kinds of questions they have, and invite them to explain how observing through drawing/photographing helped them to ask new questions.

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