OBSERVATIONAL DRAWING

A practice for fostering the maker capacities: Looking Closely, Exploring Complexity & Finding Opportunity



Choose an object to examine. Before you begin consider:

• What do you think you know about this object?

Make a series of quick observational drawings of your object: Don't worry about making changes or erasing, make several sketches on the same page and use the experience to look at your object from many perspectives.

- Give yourself time to look closely and draw an initial sketch of your object.
- Zoom in and draw just one portion that you notice.
- Turn your object or move yourself to a different viewpoint and do another sketch that shares this new perspective.
- Consider adding labels to some of the parts you have drawn.

As you examine your observational drawing consider these questions:

- How do you think this object was made?
- Who do you think made this object?
- What new thoughts do you have about the design of this object?
- What questions do you have about the object now that you have had a chance to examine it closely?
- What ideas do you have for redesigning this object now that you are more familiar with it?



Observational Drawing

This practice allows learners to notice features of an object that they may not have the vocabulary to fully describe yet. By doing several sketches, learners have the chance to engage in perspective taking and to see details they might miss at first glance.

When and How Can This Practice Be Used?

We are grateful to Melissa Butler and Jeremy Boyle of the *Children's Innovation Project* for inviting us into their learning space and sharing their Methods of Practice. They opened our eyes to the power of introducing observational drawing to very young children. After witnessing a group of kindergarten students, "noticing a screw" through a sustained period of observational drawing we were convinced that learners of all ages could engage in looking closely through this practice.

The practice can be used on its own or along with other Agency by Design thinking routines or practices. Here are some considerations for implementing this practice:

- This routine provides a chance for students to make their learning visible in a mode other than text.
- Educators have asked learners to label their drawings, or verbally share out the parts they drew, as a way to formatively assess student's knowledge of vocabulary and terms connected with specific objects.
- Educators have had students use simple viewfinders a handmade cardboard frame to view only one part of a larger or more complex object and sketch just that part. This allows the group to build a collective understanding of the whole object as they place their sketches together.
- Educators have used observational drawings as an introductory step before using the Parts, Purposes, Complexities thinking routine. Some educators have gone on to have students situate their object into a system and move into systems design from the entry point of objects. For example, if learners are examining an object like a light bulb, what are the larger systems or sub-systems connected with light bulbs? This could move into a systems inquiry about electricity, or home lighting systems, or manufacturing and appropriate disposal – the lifespan - of light bulbs.
- Students can share their drawings in a gallery-style display and sketches can be used as an artifact for further discussion about the design of objects and any next steps in an inquiry.

Photo credit: Alice Matthews Gentili

