

Nature Journals: Tools for Discovery

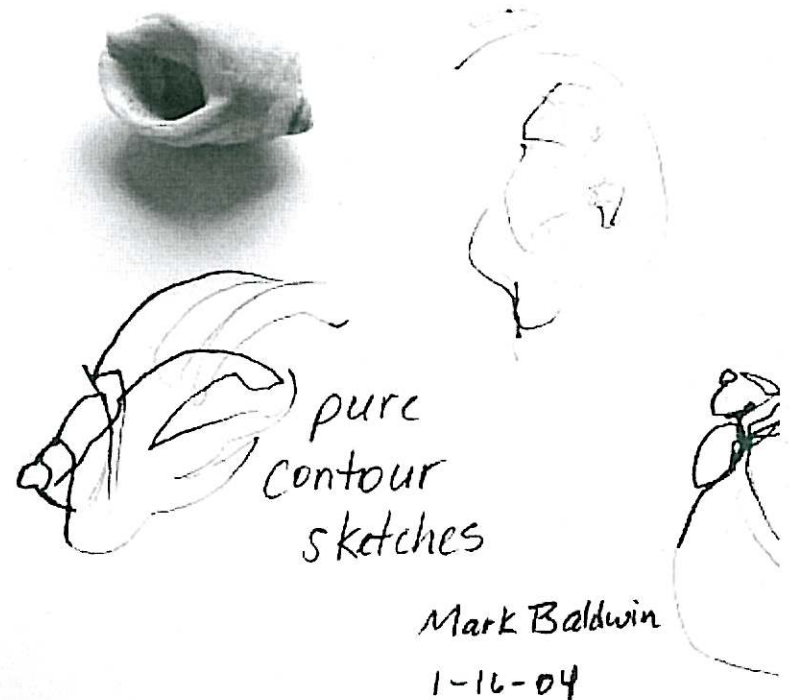
REAL OBJECTS AND HAPPENINGS IN THE SCHOOLYARD can make learning come alive. Here is an approach to learning that takes advantage of accessible objects and places through nature journals. A nature journal begins as a blank book, preferably without lines because it allows you to mix sketches with writing and record with the book held sideways. In addition to the journal you need pencils, colored pencils, pencil sharpener, and eraser. These make up the basic tool kit needed for developing observation skills.

Pure Contour Sketching

Practice the following exercise yourself and model it for your students. Then let them give it a try. In addition to the tool kit described above, each student will need a natural object such as a leaf, pinecone, or seashell. Collect plenty of these, spread them out on a table, invite each student to pick one, and pick one yourself.

Place the point of your pencil on a page. Holding the object in your other hand, focus your attention on one point on the surface of the object. Pretend that your pencil point is actually touching what you are looking at. Then let your eye begin to wander slowly over the object, while your pencil point wanders in the same way across the page. Do not look at the page at all as you draw. Draw slowly as your eye explores all the ins and outs and nooks and crannies, and keep your pencil in contact with the paper the whole time. Be patient, and do not think you need to “finish” the sketch. After a few minutes look at your paper. The

results may surprise and amuse you. Did you notice some detail about the object or do you have a question about it as a result of observing it this way? If so, your nature journal is already helping you become a more competent observer.



Modified Contour Sketching

Once you have practiced and feel confident with pure contour sketching use it in a modified way to observe and sketch objects into your journal. Modified contour sketching means spending most of your time looking at your subject not at your paper. For example, spend 80% of your sketching time looking at the seashell you are sketching, the other 20% occasionally orienting yourself on the page, checking proportions and so on. The important thing is to look at the object while you are sketching, so that your result is a representation of what the object actually is rather than your preconceptions about it. Get into the habit of writing one discovery and one question you have about an object you observe and record in your journal along with your sketch.

Curriculum Connections

The observation skill-developing exercises just described apply especially to science, art, and writing. Keeping nature journals lets students emulate what scientists, artists and writers do. Like them students can work their "raw" observations into an inquiry-based science investigation, work of art, or piece of creative writing.

Into the Schoolyard

Take your students and their journals outdoors. Don't forget your own journal! Write the date, time of day, location, and a note about the weather, and model this for your students. Let them do the same. Give special instructions if you want them to focus on something particular. Allow time to observe and record but keep it brief, especially at first. Some students may be easily distracted, while others may turn their attention inward in an attempt to make a "perfect" drawing. Keep them focused on 1) their own firsthand observations and 2) what you want them to learn.

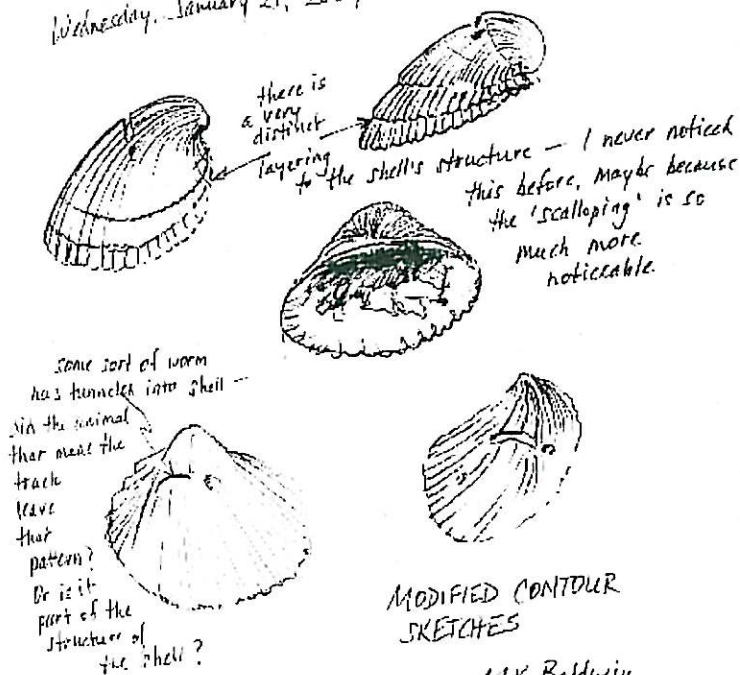
Back in the Classroom

When your observation/recording time is done allow students to voluntarily share what they have done. Stress that their journal entries are their own individual records of what they have experienced; all are valid. If you feel you need to grade journal entries focus on effort; construct a rubric and share it with them beforehand so they understand what you expect.

Create an Observation Friendly Environment

Nature journals support a classroom environment that promotes science inquiry and literacy. Encourage your students to bring objects from outdoors such as leaves, cones, seed pods, mussel shells, and fossils. Leave bird nests and feathers where you find them, though; federal and state-issued permits are required to collect these.

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M/K Baldwin

Designate one area of the classroom the "nature center" and along with many objects include a set of hand lenses, posters and nature magazines. Easy-care classroom pets and plants can find a home here as well. If possible have your classroom nature center look out onto a bird feeder and have binoculars and field guides on hand so students can identify what they see and record in their journals.

Nature journals are an exceptional tool for connecting object lessons to your curriculum, but perhaps even more important, they help lay a foundation for students you hope will become lifelong learners.

Nature Journals and the Electronic Naturalist

When you or your students ask us questions we rely on you to carefully describe the object or situation you want us to address. You can be sure you will observe more carefully and give a more accurate description when you sketch what you are seeing and keep your drawn and written records in a nature journal. *The next time you send us a question, attach a sketch along with what you write and send to us.* Simply save a good digital photo or scan of your journal entry as a low-resolution JPEG file and send it along with your question.

Nature Journals and Best Practices in Natural Science Education

Keeping nature journals is a hallmark of best practice in natural science education. Therefore we encourage you to send us your own and your students' journal entries as JPEG files to include in a special gallery devoted to nature journals on the *Electronic Naturalist* website.