

CHOOSING JOURNALING ACTIVITIES FROM HOW TO TEACH NATURE JOURNALING

Using Journals with Learners

Scientists use journals or field notebooks at almost every step of their work. The practice of field journaling supports deep observation, organizing of thoughts and ideas, and creates a written record of new ideas. Working through observations, questions, and ideas on paper can also lead to conceptual understanding through an experience that is vitally different from reading, discussion, lecture, or exploration. Scientists almost always have a purpose and a focus for their journal entries. In the context of journaling in a science learning experience, a purpose and a focus of a journaling activity can help support learner engagement and participation. *How to Teach Nature Journaling* is a book co-authored by John Muir Laws and Emilie Lygren. Its activities were designed with scaffolding and structure to support learner participation and engagement and to support authentic science learning.

Choosing Journaling Activities

How to Teach Nature Journaling includes background information on how to use journals with learners, as well as tools to support learners in being successful journalers. The book also contains many activities that can each stand alone in offering learners experience observing and recording information. These activities ask learners to record information in different ways and in different places—but very few of the journaling activities depend on a specific type of organism, topic, or environment. These more general instructions mean that almost any of these journaling activities can be used to support almost any lesson or field experience. While many BEETLES activities have specific steps in which learners use journals, journal use doesn't need to be restricted to activities in which journals already appear. Many of the instructions for activities in *How to Teach Nature Journaling* could be introduced into the flow of BEETLES student activities (or integrated into a lesson of your own). Journaling can be a particularly successful practice during the Exploration phase of an activity when the goal is often for learners to make focused observations of a specific phenomenon or part of nature, such as lichen, spiderwebs, leaves, or fungi.

It's important to think about when to incorporate a journaling activity within a longer learning experience, which activity to use, and how to frame it for learners. The following questions can help instructors make these decisions in advance or in the moment:

- **Will learners be ready to journal?** Learners likely won't be successful journalers unless their basic needs are met and their energy level is appropriate. Consider pacing of the day and learners' needs—both basic physical needs and the need to move around or be energetic—in thinking about when to use a journaling activity.
- **How will learners feel as journalers?** If it is the first time learners are using their journals, some might have resistance because of their experience with (and possible aversion to) writing or drawing in school. Many journaling activities in *How to Teach Nature Journaling* have a "hook" or game aspect to support learners' initial engagement. After learners have experience with one journaling activity, they will be more likely to be interested in trying others.
- **How can you help learners see journaling as important and authentic?** Another successful approach is to help learners feel that journaling is important and authentic—which it is. When

CHOOSING JOURNALING ACTIVITIES FROM *HOW TO TEACH NATURE JOURNALING* (continued)

journaling is explained as a tool to record what learners discover, journaling becomes a part of the exploration process and is less likely to feel like busy work. Learners also may feel trusted with information, that what they observe matters, and that they are invited into the lineage of naturalists/scientists/thinkers who use journals similarly. Showing learners examples of naturalists'/scientists'/thinkers' notebooks can help illustrate this point.

- **What will learners get out of the activity?** Deep, focused observation is the foundation of nature journaling. Journaling can help learners see and remember more of their surroundings. To use journals well, though, use journaling activities to support a field experience, activity, or lesson—not just to get learners to observe. Many of these activities could be used at any stage of the Learning Cycle, depending on how the activities are framed and what they ask learners to focus on.
- **What kinds of observations will this activity lead learners to make? How does that connect to my learning goals?** Different kinds of journaling activities will tend to lead learners to think and make meaning in different ways. When choosing a journaling activity, think about the kinds of observations learners are likely to make while engaging in the activity and consider which activity will best support your science learning goals.

The following chapters in *How to Teach Nature Journaling* offer further information and insight to guide you in choosing nature journaling activities to meet your specific goals and the needs of your learners:

- Choosing Activities to Meet Learning Goals (page 22)
- Nature Journaling Activity Chapters (page 27)
- From Activities to Longer Lessons (pp. 233–237)
- Appendix B: Activity Summaries, Learning Goals, and Possible Phenomena (pp. 262–268)
- NGSS Connections (pp. 269–271)

Following is an example of a thought process for deciding when and how to use journals:

Okay, so I'm going to do the Spider Exploration activity after a couple of active introductory games in the morning. We've done a few journaling activities this week, so learners are familiar with their journals and journaling. I want learners to really go into depth when looking at the different kinds of spiderwebs. Since we are doing the follow-up activity Spider Investigation later this week, I'm hoping learners will remember what they discovered during Spider Exploration. Journaling will help with that. I also want them to have a lot of ideas about how sheet webs and orb webs are different from one another. I want students to do the Comparisons activity (where students record every similarity or difference between two aspects of nature) while they are exploring different web types. But I think I'll give them a few minutes to check out webs without their journals first, so they'll be ready to focus later.

