

APPLYING SESSION TO INSTRUCTION

The session is not over! A critical phase of learning anything new is **application**—when the learner takes new knowledge and applies it. There is some application included in the session, but, as with all professional learning for instructors, the rubber meets the road (or trail) when the instructors apply what they've learned to their teaching and when they keep thinking about it and discussing it with their peers. For instructors to try out new activities/ approaches, program leader support is crucial. Even if instructors are excited by new ideas, encouragement and scaffolding can support instructors to try out new ideas and approaches. Following are a variety of suggestions to dig deeper into the topic and help you facilitate thoughtful implementation:

- **Staff brainstorm what they and you can do to incorporate observation strategies.** After the session reflection, your staff will have already written ideas they have about their own implementation. You can tap into these, and other ideas, through a brainstorm of what they plan to do and how you can support them in doing it.
- **Instructor observations.** If you do observations of instructors, discuss how you might incorporate elements from this session into the observations.
- **Discussing implementation of *I Notice, I Wonder, It Reminds Me Of*.** Assign each of your staff to teach *I Notice, I Wonder, It Reminds Me Of*, as written, during their next student program and to write in their journals about how it went. Then, lead them in a discussion of the activity at the end of the program. Here are some suggested questions on which to focus a reflection or discussion:
 - What impact did the activity have on your groups' ability to make observations and to engage with nature?
 - How did individual learners respond?
 - What was successful about the activity?
 - What might you do differently the next time you lead it and why?
 - How did you incorporate the activity into learners' other field experiences (e.g., journals, sit spots, etc.) and what ideas do you have about incorporating it in the future?
- **Continuing a discussion.** If there was a discussion that came up during the session that you had to cut off, and it seems like your staff is still interested, set aside some time to continue the discussion.
- **Look for external professional learning opportunities.** Encourage staff members to attend workshops by John Muir Laws (johnmuirlaws.com), Emilie Lygren (emilielygren.com), or others on nature journaling. Purchase a staff copy of *The Laws Guide to Nature Drawing and Journaling* and *How to Teach Nature Journaling*. Encourage staff to read and use these resources.
- **Assign your staff a reading that is related to the ideas in this session.** Invite your staff to use active reading strategies such as underlining



important points (I notice...), writing questions (I wonder...), and writing connections (It reminds me of...) in the margins. Have them pair up with someone else and compare their notes and ideas. Then, bring this discussion into the whole group. Following are some suggested readings:

- Chapter 1: Observation and Intentional Curiosity (pp. 5–12) in the book *The Laws Guide to Nature Drawing and Journaling* by John Muir Laws in collaboration with Emilie Lygren. This chapter begins with an exploration of the prompts “I notice...,” “I wonder...,” and “It reminds me of...” followed by tips on how to train yourself to be more curious.
- “Why Nature Journaling?” (pp. 4–8) in the book *How to Teach Nature Journaling* by John Muir Laws and Emilie Lygren. This excerpt explains the many benefits of nature journaling, which is connected to making observations.
- “Three Prompts for Deeper Nature Observation” by John Muir Laws. This short article reviews *I Notice, I Wonder, It Reminds Me Of* and why it helps learners make observations in nature. (Source: <https://johnmuirlaws.com/deep-observation/>)
- “Falling in Love with Nature” by John Muir Laws. In this short article, Laws speaks about how focusing “sustained compassionate attention” on organisms in nature helps create emotional bonds with the natural world, resulting in stewardship. (Source: <https://johnmuirlaws.com/falling-in-love-with-nature/>)
- “Learning the Grammar of Animacy,” a section from the book *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teaching of Plants* by Robin Wall Kimmerer compares scientific and Indigenous ways of observing and describing and how they shape our relationship with nature.
- “Noticing: How to Take a Walk in the Woods” by Adam Frank. A short article on how using science observation skills and mindset can lead to wonder in the natural world. (Source: <https://www.npr.org/sections/13.7/2013/05/14/178467726/noticing-how-to-take-a-walk-in-the-woods>)
- “Fine-tuning the Senses,” an excerpt from the book *Tom Brown’s Field Guide to Nature Observation and Tracking* by Tom Brown. In this chapter, Brown describes a wide variety of ways to improve observation skills.
- “A Philosophical Interlude,” an excerpt from the book *The Ardent Birder* by Todd Newberry. In this chapter, Newberry describes making detailed observations as being like interviewing an organism. The BEETLES student activity *Interview an Organism* is inspired by this approach. Some questions to ask: *How might you apply “interviewing organisms” to your instruction? How can you help learners ask questions that lead to deeper observations?*
- “Empathy for Animals: A Review of the Existing Literature” by Ashley Young, Kathayoon A. Khalil, and Jim Wharton. This review

Resources on nature journaling and how to teach it. For more information on how to help learners generate creative, reflective writing and drawing from observation, see *How to Teach Nature Journaling* by John Muir Laws and Emilie Lygren. The book is available for purchase from Heyday Books (<https://heydaybooks.com/how-to-teach-nature-journaling/>), or a free download is available (<http://emilielygren.com/product/how-to-teach-nature-journaling/>) or <https://johnmuirlaws.com/product/how-to-teach-nature-journaling/>). The BEETLES professional learning session *Field Journaling with Students* (written in collaboration with John Muir Laws and Emilie Lygren) helps instructors understand the value of nature journaling and how to do it well with learners.

See the complete citation for *The Laws Guide to Nature Drawing and Journaling* in the References section.



johnmuirlaws.com is a rich resource for reading and learning about nature journaling and making observations.



MAKING OBSERVATIONS

of literature summarizes findings from current research on the development of empathy in childhood (<http://iranarze.ir/wp-content/uploads/2018/07/E8488-IranArze.pdf>).

- **Distribute 1 copy of the optional handout *A Whole Bunch of Quotes Related to Making Observations* to each participant and have them discuss.**
 - Ask participants to choose a few quotes they find meaningful and then discuss them with a partner.

