TEACHING NOTES

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's some application included in the session, but—with all professional learning for instructors—the rubber meets the road (or trail) when instructors apply what they've learned to their instruction, and when they keep thinking and discussing with their peers. If you want your instructors to try out "new" activities/approaches, they'll need ongoing support from you. Even if they're excited by new ideas, it's easy for instructors, especially veteran instructors, to keep doing what they've been doing already, and not try out new activities/ approaches. Some might react to content of this session as being simple, and that they "got it," but continue asking mostly narrow questions in their practice without realizing it. Some are able to transition to a more broad question-focused approach pretty naturally, but there are many who really struggle with it, and may continue asking mostly narrow questions, or ask a broad question, then give students hints or the "answer," or not really listen to student ideas. Below are a variety of follow-up activities and discussions to dig deeper into the topic, and help you facilitate thoughtful implementation.

- Whole group staff brainstorm of what they and you can do to encourage incorporation of broad questions and the "Guide on the Side" role. After the session reflection, your staff will already have written ideas about implementation into their instruction. You can tap into these and other ideas through a group brainstorm about what they plan to do and how you can support them in doing it.
- Discussing Implementation of questioning strategies. Assign your staff to each try out the plan they made with students during your next student program and write in their journals about how it went. Then lead them in a discussion during a meeting at the end of the program. Here's some suggested questions to focus a reflection or discussion on:
 - » Did your questions encourage exploration, thinking, discussion, and engagement with nature?
 - » What was successful about the activity?
 - » What might you do differently the next time you lead it and why?
 - » How did you incorporate questioning practice into students' other field experiences, and what ideas do you have about incorporating it in the future?
- **Instructor Observations**. If you do observations of instructors, discuss how you might incorporate elements from this session into what you look for during the observations.
- Set aside time for your staff to read the handout, Common Mistakes in Questioning, and to discuss it. This could work well after they have had a chance to work on their questioning during instruction with students.
- **Continuing a discussion from the session.** If there was a topic that came up during discussion that you had to cut off, set aside some time

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to continue it.

- Conduct a Questions Lab. To give your instructors practice asking questions, set up a questions lab where they practice with each other. Bring in some interesting objects, and give one object to small groups of staff (5–6 people per group). Have each group spend a few minutes planning out a sequence of questions they might use with that object (using the *Goals and Prompts for Instructors* handout). Have each group nominate one person to be the leader, and have the leader rotate to a different group. You can keep repeating these steps to provide more staff members with a chance to be the leader. By the end, everyone should have participated in planning questions and many people should have had the opportunity to lead an exploration.
- Take turns leading exploration outdoors. Take group outside and
 instruct the group to find something of interest for everyone to
 explore. Once you've found something, choose a volunteer to lead
 the exploration, and choose some observers to fill out exploration
 checklists. Then do the same with a different leader and object.
- **Observe instructors, then discuss with group.** Arrange to observe as many field instructors as possible (even if it's just one). Arrange to discuss these with the team at next meeting.
- **Observe individual instructors.** Be sure to discuss their goals and specifics on what they would like you to observe beforehand. Some possible options related to this session are: use and number of broad and narrow questions; time spent with students making observations; evidence on any of the goals on the *Goals and Prompts* handout; or evidence of how an instructor views their role as an instructor. See BEETLES Coaching Materials for more information.
- Gold Questions. Create a binder, journal, or online document for your staff where they can collect "gold questions"—those questions that were truly productive and succeeded in getting kids to observe closely, think critically, or discuss with each other.
- Before or after the session, assign your staff to read the "Intentional Curiosity" section from *The Laws Guide to Nature Journaling*. Tell them to use Active Reading strategies: underline what they think are important points and write questions and connections they have in the margins. Then assign the prompts below to discuss, first in pairs, then in the whole group. Possible Questions/Prompts for Discussion:
 - » What are some points/quotes you found interesting? (You might ask each instructor to choose one quote from the passage, and be ready to explain what they think the author intended, questions/connections they have about it, and why they found it interesting.
 - » Which settings within our society encourage curiosity? Which settings discourage it? Why might that be the case?
 - » What are ways we can encourage a culture of curiosity within our program
 - » What information from this passage do you think might be worth communicating to students, and how might you do that?

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Consider using the Tuning Protocol to help guide these discussions: www.nsrfharmony.org/system/files/protocols/tuning_0.pdf

See the full citation for The Laws Guide to Nature Journaling in the References section, on page 49.