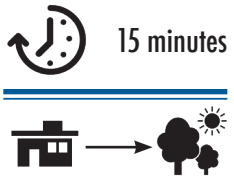
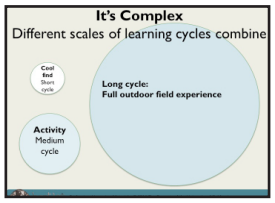
Planning a Long/Extended Field Experience (whole hike) Learning Cycle

YOU ARE HERE:



1. **Show slide 1: *It's Complex*. Explain that it's good to start simple with the Learning Cycle, then build up to cycles within cycles.**

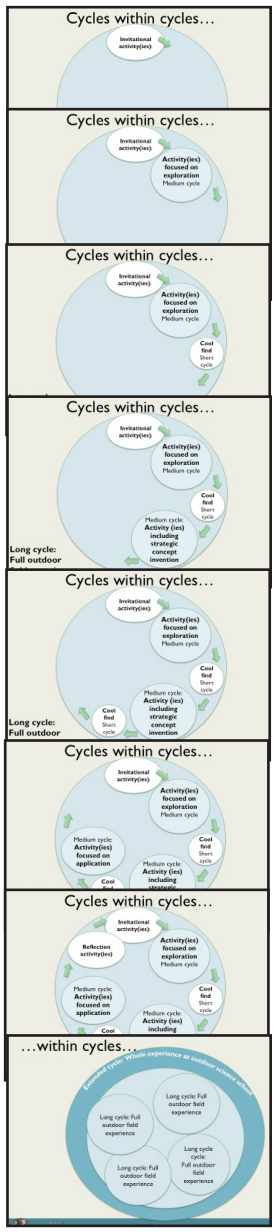


Slide 1

   a. When you first start applying the Learning Cycle, it's easier to focus on a short cycle, or on a single activity, such as the *Lichen Exploration* activity, or on a cool find.
   b. But then you can build up to more complex applications.
   c. There are cycles within cycles.
   d. During a "long cycle" field experience, such as a hike, each separate activity during the hike may have its own cycle within the greater cycle of the full field experience.

2. **Flip through the following slides, explaining the story of how a long learning cycle-based field experience might run:**

Slides 2-9



   a. Slide 2: You start off with some invitational activities that get students to share their prior knowledge on the topic, and get them engaged.
   b. Slide 3: Then you do one or more activities. Each one would have its own medium-sized cycle, and would include some concept invention, some application etc., but would be mostly focused on exploration.
   c. Slide 4: You might run into an interesting find, like an organism, and have a short cycle experience with it.
   d. Slide 5: At this point, students are probably ready for some deeper concept invention. You might do one or more activities that are full cycles in themselves, but are particularly strong on concept invention.
   e. Slide 6: Then maybe you run across another interesting find and go through another short cycle experience.
   f. Slide 7: At this point in the field experience, students are engaged in one or more activities that again, are cycles in themselves, but are strongly focused on students applying what they've learned.
   g. Slide 8: At the end of the long field experience, they do some kind of reflection activity.

Preparation:

1. **Set up and test in advance the projection system.** Make sure all participants will be able to see items projected during the session. Spend a few minutes reviewing these materials.
2. **Make sure participants have handouts from main session.** Each pair of participants should have copies of *The Learning Cycle Explained* & *Applying the Learning Cycle Lens to Outdoor Instruction.*
3. **Choose a longer field experience you already do at your program to focus on.** Decide on a conceptual focus, e.g., 2-hour creek program focused on ecosystems or 5-hour hike focused on adaptations, that you are interested in redesigning.
4. **Choose a large flat outdoor area to use for a learning cycle brainstorm.** Alternatively, you can do it indoors with a table for each phase.
5. **Make Learning Cycle posters.** Get butcher paper or large flip chart paper and at the top of each, write the name of one phase of the learning cycle (one poster will have Invitation on it, one will have Exploration, etc).
6. **Divide each poster into 2 columns.** Label one column "Activity/Question" and the other, "How it Addresses Goals."
7. **Prepare the stations.** Each poster will be its own station that participants rotate through. Make sure each station has: a secured poster with nails, stones, or other weights so it doesn't fly away), large sticky notes, broad-tip felt markers. *Note: You can do this without the sticky notes, and have participants write directly on the chart paper, if you have flat backing for each sheet.*

3. **Show Slide 9:** *Within Cycles..* **Explain that the students' entire experience at outdoor science school can also be a big, fat, juicy learning cycle:**
   a. A learning cycle-based overall outdoor science school experience begins with more invitational activities, then moves into exploration-focused activities.
   b. Then students are ready for deeper concept invention.
   c. Toward the end of the experience, the focus is on students applying what they've learned to different contexts, such as making connections to their home environment and environmental responsibility.
   d. The experience ends with reflection back on what they've learned and how they learned it through the whole experience.

4. **Show slide 10** *Long Learning Cycle: Extended Field Experience.* **Explain the next activity, focusing on a longer field experience:**
   a. If you want a whole field experience/hike to be an effective learning experience, you can use the Learning Cycle to guide your planning.
   b. Explain: Together we'll be planning a learning cycle-based longer field experience we already do at our program.
   c. Tell them which program they'll focus on, including conceptual focus.
   d. Explain: We'll now be thinking of activities that could be used during this field experience.

5. **Explain what they'll do at the stations:**
   a. In teams, you'll rotate through a series of posters, each representing a different phase of the learning cycle in this field experience.
   b. At each poster, you'll brainstorm activities or questions for students to address that phase of learning.
   c. You should think about:
      - What are the goals of that learning cycle phase?
      - What should students be doing in that phase to support their learning?
      - Which specific activities or questions best support student learning at this phase, and fit into the themed field experience?
      - What might be missing to accomplish the goals of the phase? What activities and/or questions could help here?

6. **Take participants outdoors to the learning cycle area. (Can also be done indoors with a table for each phase) and arrange logistics.**
   a. Gather participants in a large flat area.
   b. Lay out the Learning Cycle phase signs next to pieces of chart paper, along with some large post-its and pens. If necessary, nail or weigh them down so they won't blow away.
   c. Divide the group into five teams to rotate through the phases together, discussing and brainstorming activities and questions at each one.

7. **Explain the procedure:**

a. Each group will have about 5 minutes to discuss each phase.

b. Each group should write ideas on post-its and stick them to chart paper.

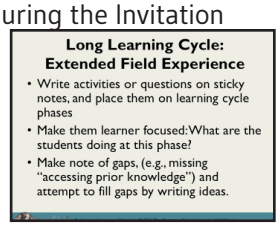
c. Groups can also annotate another group's post-its by putting plus signs (+) if they agree and minus signs (–) if they disagree with their ideas.

d. There will be time at the end to go back and look at all the phases again, and at the notes of other groups.

8. Remind them of the following:

a. Consider all activities as part of one extended field experience that helps students understand important ideas related to adaptation (or whatever the main conceptual focus of the experience chosen is).

b. What kinds of things should students be doing during the Invitation phase of a field experience? Exploration phase? Concept invention? Application? Reflection?



Slide 10

c. At each phase, try to think of: activities you are familiar with and questions you already ask.

d. But also think about what goals are *not* being met. Brainstorm new questions that could be posed to students or new activities you think might work, but haven't necessarily been tried or developed.

9. Remind them to use the Learning Cycle handouts.

a. Use the handouts from the Teaching and Learning session: *Applying the Learning Cycle Lens to Outdoor Instruction* & *The Learning Cycle Explained*.

b. On the *Applying the Learning Cycle Lens to Outdoor Instruction* handout, look at the section titled, "Long: Extended Field Experience (whole hike) Learning Cycle."

c. When at a poster, such as the invitation poster, you can just read the brief section about the invitation phase to help you think of ideas.

d. Do the same for each of the five learning cycle phases.

10. Organize the rotation, listen in on conversations, and signal time as groups rotate through each phase.

a. Allow ~ five minutes for each group to brainstorm activities for each phase, and tell them the signal for when time runs out.

b. Assign a direction for rotation (clockwise makes sense) after completing each phase.

c. Listen in on conversations and make sure they are focused on student behaviors and activities that support student learning in each phase. If not, ask questions to help out, such as (at the Invitation station), "It doesn't look like there are many activities or questions that help students access prior knowledge. Can you brainstorm some ideas?"

11. Gather the group together, lead a brief discussion about the results of

TEACHING NOTES

Quick discussion. This discussion is just a quick overview while participants can see all the posters together. A more detailed look at an individual poster follows.

If you have time now, or during a later meeting, you can do a similar debrief of each phase, and make up a chart showing which activities and questions your program has available for each phase—instructors can then use this tool in their program planning.

the brainstorm, and ask:

- Overall, what do you think of the set of activities you laid out? Do they seem to make sense? Why or why not? Do others agree/disagree? Why?
- What's the activity balance? Are there more or less for any phase(s)?
- Return inside.

12. Show slide 11: Invitation Phase Goals. Review the Invitation phase.

Slide 11

a. Post the Invitation phase chart paper with the ideas they added to it.

b. Lead a discussion focused on the Invitation poster by asking some of the following questions:

- *Do these ideas fulfill the goals of this phase of the learning cycle?*
- *What goals are not being fulfilled?*
- *What's missing?*
- *What ideas do you have for filling those gaps?*