The Clifton Institute

How To Teach Nature Journaling

The goals of nature journaling are to connect to nature, to learn about nature, and to remember what we see out in nature. And to have fun! The most important thing you can do as an adult nature journaling with kids is to keep these goals in mind. If they are making observations and putting them down on paper, regardless of how "good" the drawings or writing are, they are nature journaling!

The most basic way to nature journal is to use INIWIRMO! A nature journaler's most important tools are observational skills and curiosity. INIWIRMO helps us practice those skills. It stands for:

1. "I notice…" "I notice…" helps us make observations. An observation is anything we can perceive with our senses: sight, smell, touch, and hearing.
2. "I wonder…" This is our tool for asking questions! Right now, we don't care about the answers to the questions. You can go back to the things you noticed and ask questions about them.
3. "It reminds me of…" "It reminds me of…" helps us make connections between what we're paying attention to and other things we have seen, experienced, read about, or learn about before. Be creative! And be silly!

These are all skills that students can practice. With time they'll become more observant and curious! Encourage students to use all three prompts in their nature journals. It can help to say them out loud and see how your brain fills in the rest of the sentence.

The goal of nature journaling is not to make pretty pictures or write well. It is important that the feedback we give students reflects those goals. Avoid saying "That looks really good," or "What a pretty picture," or "You're so good at drawing." A good strategy is to use INIWIRMO on their journal pages. For example, you could say things like

- "I notice that you included ____ in your drawing. That helps me know what plant you were looking at."
- "I notice that you took a lot of notes. I can tell you were looking really closely."
- "I notice you were drawing a ____. Can you tell me the story of what you observed? Why was that interesting to you?"
- "I see that you counted all the objects in your circle. That's a really effective way of using numbers!"
- "I can tell you like writing more than drawing. I wonder what it is about writing that you like?"
- "That's an interesting question! I wonder what some possible explanations are?"

Here are some tips for working with students on nature journaling:

- We always recommend making time for you to nature journal along with the kids. That shows them that it is a meaningful activity that adults practice too. You might feel like an imposter teaching nature journaling if you're not sure about it yourself. It can actually be inspiring for kids to see adults learning something new and persevering through a challenge. And your role is not to teach them how to draw; rather, your role is to teach them how to make observations, be curious, and believe in their own ability to think scientifically. If you model those behaviors they'll follow along.
- All the skills of nature journaling—making observations, asking questions, sitting quietly, drawing, writing, laying out pages, being creative—are skills we can get better at with practice. If students say things like "I'm not good at this" or "I can't draw" try to avoid reflexively saying "Yes you can!" That

denies their experience *and* doesn't give them room for growth. You can point out specific things you like in their drawings, ask if there are things they are struggling with you might be able to help with, and remind them that they will get better the more times they do it.

- The five Ws—who, what, when, where, why, how—are a good place to start when asking questions but there are other options. The International Baccalaureate uses a framework of
    - Form: What is it like? What are its parts? How do they fit together?
    - Function: What is its function? How does it work?
    - Causation: Why is it like this?
    - Change: How is it changing?
    - Connection: How is it connected to other things? That could be physically or what it brings to mind.
    - Perspective: What other perspectives might there be?
    - Reflection: How do I know what I think I know? How strong was my reasoning?
    - Responsibility: What is my responsibility towards this creature / place?

How to Run a Nature Journaling Session

1. When you arrive at the area, explain the boundaries. (e.g. students must be in sight, students can go as far as the rock wall…) Ask that they sit in the shade. If they want to draw something in the sun you can discuss whether it's a good idea to pick that object and move it into the shade. Remind them of the nature journaling rules: students should put the date and weather at the top of the page, they should draw something they can see right now, and they should work independently. Remind them of the prompt. Tell them that they are going to have ___ minutes to journal.
2. Give students a minute or two to find a spot and sit down. You may need to give a 30 second countdown to prevent aimless wandering. If they keep wandering give them a suggestion of what to draw. "Since you're having a hard time choosing, can I make a suggestion for you?" "Would you like to draw this flower with me?" "I'm going to set you a challenge. Try to draw this leaf and find three interesting things about it. I bet you can do it."
3. For the first few minutes try to journal yourself so that the students see it's not just busy work. It's okay to ask students to give you a couple minutes to work in your journal because it's important for you too.
4. After a few minutes you can circulate and help students with drawing, spelling, identifying what they're looking at, etc.. If they ask you questions ("What is this?", "Why is it this way?", "What's this bug doing?") first encourage them to write those questions down. And then encourage them to make their own observations and hypotheses rather than just telling them the answers.
5. Give a 2-5 minute warning before journaling time is over.
6. If students are struggling, first ask what they're struggling with. They may or may not be able to tell you.
    a. If they're having a hard time choosing something to draw, you can kindly pick something for them. Sometimes the students who seem most averse to journaling are just feeling overwhelmed by getting started and giving them a suggestion of what to draw is a good place to start.
    b. If they're not into the prompt, it's okay for them to just draw something they're seeing.
    c. If they're feeling like drawing is a struggle, remind them that the important thing is making observations and that they will get better at drawing with practice.

   d. One fun way to get started drawing is to do a blind contour. It's fun to draw a partner's face or they can find a natural object to draw. The rules are that once you start you can't lift your pencil from the page and you can't look at the paper. They're silly but they capture something of the essence of what you're drawing!
   e. Another fun way to get a drawing in your page is to make a leaf rubbing or trace a leaf.
   f. Asking them to come up with questions sometimes just results in blank stares. You can start with observations they've already made. Then try prompting questions with either the five Ws or the IB framework. "I wonder why that is?" "I wonder if that would change over time?" "I wonder how this thing works?" "I wonder what this thing's job is?"
   g. If they're having a hard time writing or spelling, you can ask them to share their observations with you and you can write them down. Try to write them down as verbatim as possible so they know their observations are valued.
7. When students say "I'm done":
   a. Remind them of INIWIRMO. Can they make three more observations? If they've made observations but haven't asked any questions, encourage them to try to come up with three questions. This may mean sitting with them and prompting new observations or questions. Once they say them out loud encourage them to put them in their journals.
   b. Make suggestions about adding more details: make a map, add a closeup view, add notes, draw something from a different angle, add labels…
   c. They can always start something drawing something new. Or they can sit quietly for the rest of journaling time.
8. If students really resist journaling, the first option is to suggest that they sit quietly and make observations, watch the birds, look at the clouds, enjoy the space they're in. If that doesn't work, they can walk around the journaling area quietly not disturbing the other students. If that doesn't work or the whole group is resistant to journaling, you can go on a short quiet walk, still trying to encourage them to make observations rather than chatting or playing.
9. With about 5 minutes to go, bring the group back together to discuss. (My Secret Plant takes a little more time because they have to swap journals and find each other's plants.) Each prompt has some discussion questions that go with it. Ask if anyone wants to answer a discussion question. They may just share their whole journal page and that's fine. After going through the questions ask if anyone would like to share their journal page with the group. Try to give specific feedback rather than saying "That's so good!" Make it clear that the students don't have to share if they don't want to.
10. Make sure no one leaves anything behind before leaving the journaling area.

<u>General Nature Journaling Introduction</u>

1. "We're going to spend some time nature journaling. First I want to talk about why we nature journal. Why would you keep a regular journal?" Ask students for suggestions and write them on the whiteboard.
   a. to remember experiences
   b. to express your feelings
   c. because it's fun
   d. …
2. "All of those are reasons to keep a nature journal too! A nature journal is also a very good way to learn about nature! You can learn from teachers and books and movies and podcasts. But you can

learn so much by spending time outside and making your own observations! You already have all the skills and tools you need to be a scientist! It's also a way to be calm and peaceful. Sometimes being around other people can be a little tiring or it can make it hard for you to hear your own thoughts. Spending time by yourself especially with a piece of paper and pencil can help you find your own voice."

3. "I keep my own nature journal. Here are some example pages."
4. "I'm going to give you some tools that will help you pay closer attention to nature. Sometimes I say these sentences out loud to myself. That prompts my brain to fill in the blanks. Isn't that weird?"
    a. The first tool is the sentence "I notice…" "I notice…" helps us make observations. An observation is anything we can perceive with our senses: sight, smell, touch, and hearing.
    b. The next tool is the sentence "I wonder…" This is our tool for asking questions! Right now, we don't care about the answers to the questions. You can go back to the things you noticed and ask questions about them.
    c. Our last tool is the sentence "It reminds me of…" "It reminds me of…" helps us make connections between what we're paying attention to and other things we have seen, experienced, read about, or learn about before. Be creative! Be silly!

    These are all skills that you can practice. With time you'll become more observant and curious! To remember these tools just remember INIWIRMO ("een-ee-weer-moh")! Try to use all three prompts in your nature journal.
5. "There are three ways of recording observations in your nature journal. You can use pictures: draw a sketch of what you're looking at. You can use words: they can be full sentences, lists, or just labels. Using words helps capture things that are hard to draw. And you can use numbers: using numbers can reveal interesting patterns and lead us to deeper observation. You can count, estimate, or measure things to put numbers in your nature journal." It can help to show what that would look like on the whiteboard.
6. "If you're nervous about writing or drawing, you can get better at anything with practice! The only way to be good at something is to do it over and over again! This week we're going to have five nature journaling sessions and I bet by the end of the week you'll be more comfortable. Nature journaling is about recording information. If you're more comfortable writing, you may write more. If you're more comfortable drawing you may draw more. If you like counting and measuring, you may do that."
7. "In a regular journal or sketchbook, you might want to spell everything right, use proper grammar, and make really pretty pictures. A nature journal is a special place where you don't have to do any of that. But there are a few things I will ask you to do."
    a. "You should always write down the date and the weather (you can use symbols). Why do you think that is?"
    b. "I'm going to ask you to focus on things that are in front of you. Not your favorite cartoon, not an imaginary animal, not something that you saw this morning. The best way to learn about something is to look at it really closely."
    c. "I'm going to ask you to work by yourself unless you need a grownup's help. So nature journaling time should be quiet and you should be sitting far enough that you cannot touch any other students. This is a special time to make your own observations and to explore on your own. If you feel like you're done we will probably encourage to try to do a little more.

But this can also just be time for you to sit quietly and listen to nature and watch the birds fly by."

8. "Let's take the Nature journal Pledge: I promise to look, hear, and feel. I promise to be curious."

My Secret Plant

1. "Today you are going to create a treasure hunt for a partner by using words, pictures, and numbers to describe a plant. Each of you will choose one plant, then describe it in your journal as accurately as you can using words, pictures, and numbers. Include enough information so that your partner will be able to find your plant."
2. "What could you include in your journal to help your partner find your plant?" DEMONSTRATE suggestions on the whiteboard. Ideas include color, size, numbers of parts, map showing where it is, drawings or descriptions of unusual details such as bug bites or holes.
3. "You will have X minutes to record your notes. At that time, we will come back together. Make sure you'll be able to find your plant again! Then you will bring your partner to the area near our plant and give them your journal notes. Make sure you are not working too closely to your partner so they can't see what you're drawing!"
4. When there are 15 minutes left, give the signal for partners to meet up, swap journals, and show each other the general area of their plants.
5. When there are 10 minutes left, bring the group back together to discuss.
    a. Ask the students to stand in a circle and put their journals down on the ground open to the page they just made. "If you don't want anyone to know who's yours you can put it down and move around the circle. Take a minute to walk around the circle and look at each other's journal entries. Everyone has a different way or recording information and we can learn from each other. How did different people lay out the page? How did people use words and pictures together to show observations? Discuss what you notice with the people around you."
    b. Ask the students to have a seat with their journals next to their partners and bring their attention back to you. "What were some of the details that really helped you find your partner's plant? When your partner was using your notes, were there any details you wished you had included? What kind of details would be helpful in the future? Were there any interesting approaches you saw in your partner's entry that you might want to use?"
    c. If there's time, have pairs compare and contrast their two plants. Give them a minute to discuss among themselves one or more of the following questions. "What is similar between the two plants and why do you think that is? What is different and why do you think that is? How does how the plant looks help it live in this environment?"
6. *VARIATION: Ask everyone in the group to find an object in the same category. We will all go find our own leaf / stick / rock / flower / dragonfly exuvia / feather / mushroom. Everyone makes observations of their own objects. At the end place their journals in a circle with the objects in the center. Each student moves to a position in front of someone else's journal and tries to identify the object that was drawn in that journal. Pick up the object. Does everyone agree that the objects are with the right journals? Objects (of the right type) can then be taped into journals.)*

Zoom-in Zoom-out

1. “Today you are going to observe something from three points of view: life size, close up, and far away.”
2. DEMONSTRATE ON WHITEBOARD. “Start with a sketch that is about life size. If your object is bigger than your journal you can draw just a part of it. Add written notes about what you notice at this distance.”
3. “Then choose a part of the object that you find interesting, and ‘zoom in’ to observe it in detail. You can draw a circle around the part you find interesting and then a larger circle where you draw the close up.”
4. “Finally, step back and make one last sketch that shows the whole object and where it is in the environment. Add written notes about what you see at this scale.”
5. “If you get stuck or don’t know what to draw or write, remember INIWIRMO. Say the prompts out loud and see what comes out of your mouth.”
6. When there are 10 minutes left, bring the group back together to discuss.
    a. “What did you notice when you looked up close? What can you learn about something by looking at its detail?”
    b. “What did you notice when you zoomed-out? What can you learn about how something works by looking at it from far away?”
    c. “How were the structures or shapes you saw in the magnified view similar to the structures you saw in the distant view? How are they different?”
    d. “What things in the environment might impact or influence the thing that you drew? Can you come up with any explanations based on evidence about why your object is the way it is?”

String Safari

You need to provide the students with loops of string, hula hoops, or other ways of marking off a small area of the ground.

1. “What are the three prompts again? INIWIRMO FOREVER!”
2. “You are about to discover a world hidden in plain sight. When you train yourself to look closely you can find amazing things anywhere. We will give you each a loop of string that you can place on the ground in a circle. You’ll look for plants, animals, natural objects, evidence of animals, or any other interesting treasures you can discover in your string. You will need to observe closely to find as much as you can within the boundary.”
3. DEMONSTRATE ON WHITEBOARD. “ You could make an overhead view of the circle and show where everything is found. Or you could just draw some of the objects individually. If you find a lot of something you could count how many you find and record that number! Or compare two similar things you find! If you get lost in observing something interesting that’s great! Use pictures, words, and numbers to describe what you find.”
4. When there are 10 minutes left, bring the group back together to discuss.
    a. “What was it like studying a tiny world? What was the most interesting observation you made? What questions do you have about what you found in your circle?”
    b. “If you came back in one week do you think you would notice any changes?”

c. "If you could do this same activity again anywhere on earth where would it be and why?"

INIWIRMO

1. "Today is going to be a little bit more of a challenge because we're not going to give you specific instructions about how to nature journal."
2. "Let's review the INIWIRMO tools."
3. "Today when we go nature journal, you will each pick an object to nature journal about. Try to use each tool at least once. Write or draw what you notice, what it reminds you of, and what you wonder. Try to use numbers as well. Remember you can count, estimate, or measure to put numbers in your nature journal."
4. When there are 10 minutes left, bring the group back together to discuss.
    a. "Does anyone want to share something they learned during the process of journaling?"
    b. "Does anyone feel like making observations is easier now than it was at the beginning of the week? How about asking questions? Writing? Drawing?"
    c. "What skills do we practice when we use INIWIRMO? Where else could you use these skills?"

Comparison

1. "Today we are going to pick not one BUT TWO objects to nature journal about. Your goal is to notice similarities and differences and record them in your journal using words and pictures. For example, I might choose two leaves or two flowers or two rocks or two insects."
2. "Think about how you might record TWO things in your journal. Does anyone have any ideas about how you would organize your observations?" DEMONSTRATE ON WHITEBOARD. "You could put everything about object A on the left page and everything about object B on the right page. Or you could take one page and divide into two columns and record bullet points that compare and contrast on either side of the line. You could even make a Venn a diagram to show what the objects have in common or not!"
3. "As always you can either write or draw. Try to use both but use whatever you are comfortable with!"
4. This one might take a little more time since they're working on TWO objects so discussion can be shortchanged if necessary. When there are 10 minutes left, call the group back together.
    a. "What were some similarities you noticed? Why do you think that is?"
    b. "What are some possible causes for the differences you observed?"
    c. "Do you think your objects will change over time? Will they become more similar or more different? Why?"

These tips and lesson plans draw heavily on John Muir Laws' books The Laws Guide to Nature Drawing and Journaling and How to Teach Nature Journaling. You can learn more at johnmuirlaws.com and wildwonder.org.