

## Making and Using Field Journals With Children—Presenter Notes

Madeleine Kettner, Manitoba Nature Summit, 2012

### **Who am I?—(3 min.)**

Good morning, my name is Madeleine Kettner. I'm really excited to see you all here this morning. We are going to have a lot of fun talking about field journals in this workshop, but first let me just tell you a little bit about myself. I am a third year classroom teacher in Seven Oaks School Division. Currently I teach Grade 4/5. Before working in the public school system, I worked as a naturalist for a year at an outdoor education facility in northern California (near Yosemite). I have also worked several seasons as a park naturalist in Canada and the USA and have coordinated the nature and wilderness program at a residential camp.

I have a strong commitment to engaging children outdoors and to giving them an appreciation for nature. I have found field journals to be a very useful tool—a tool that has worked well for me in my approach to sharing nature with children. I'm by no means an expert, but I have taken note of what works well and feel that my students enjoy the experience of creating field journals as well as benefit from the process.

Before we go any further, I am curious who we are dealing with in this workshop. Can we please quickly go around and you can tell me whether you work at a daycare or a school and with what age of children? That way I can perhaps make some appropriately tailored suggestions throughout the workshop. Thanks.

### **What is a Field Journal?—(5 min.)**

Often when people hear the name field journal, they assume that it is some sort of diary. In its most pure form, a field journal is actually a scientific tool used by scientists who do work outdoors or “in the field”. Geologists, biologists, botanists and entomologists all use field journals to document their day to day discoveries, to record observations and questions, to identify unusual specimens and to learn more about the world around them. Above all, a field journal is what scientists take back to their office, lab or (in our case) classroom in order to further investigate their findings and to draw conclusions from the observations and discoveries they have made.

This is why it is critical for scientists to record their observations meticulously in their journals. Scientific sketches and diagrams, anecdotal notes, pertinent information such as date, time and

conditions, sometimes even small artifacts taped into the journal (or soil smudges, leaf rubbings, or track measurements)—all of these details are crucial to ensure that accurate conclusions are ultimately drawn. When I go out with students, we often talk about our field journals being like a nature scrapbook...but a scrapbook with a purpose. A scrapbook that can be looked through later and analyzed in detail.

For teachers, a field journal can also lend an “academic” or “paper-and-pencil” element to excursions with older students. Drawing in a literacy piece on a field trip by asking students to reflect on their experiences by writing in their field journal or having a place for students to write down questions, take notes or even make mathematical calculations can lend a sense of academic expectation to a day at the park. Journals can even be taken in for assessment, though it is important for field journals not to just become another classroom chore.

A field journal is usually small so that it is easy to fit in a pocket or backpack. Professional field journals are usually made of waterproof paper and have a hard cover or metal case that makes them easy to write in even when there is no writing surface available. With students, I usually laminate the covers of the field journals, if possible, and keep them in ziplock bags so that they are not damaged by rain. Sometimes students bring along clipboards for easier writing and sketching. That being said...I did have a student who dropped his entire field journal into a pond last year while we were dipnetting. He fished it out, let it dry and declared that the wrinkly pages would serve as a scientific reminder of the windy conditions of the day and the quality of the water. When you are thinking like a scientist, everything counts as evidence!

### **Creating an Atmosphere of Enthusiasm Around Field Journals—(5 min.)**

In my experience creating field journals with children, I have noticed that students come to treasure their journals a great deal. At parent conferences, my students eagerly drag their parent over to the bin of field journals to share their scientific observations. At the end of the year they can't wait to take the journals home (much more so than their old math work or writing). When I worked at Foothill Horizons, I was surprised to see high school students returning with their field journals from years earlier (*tell story*). But this sort of attachment does not occur on its own. It is built by the sense of importance and anticipation that you convey to children when you first provide them with field journals. It is also built by the careful data that children put into their field journals while experiencing a variety of meaningful outdoor activities.

Depending how you are planning to use a field journal—whether mainly for sketching, writing, science or free time—you may choose to introduce the field journal differently. The age of your students will also make a big difference. (For pre-schoolers it might be more of a

sketchbook/scrapbook while for school-aged students it might be a curriculum-linked tool with specific objectives, expectations and even assessments attached to it.) What is crucial, however, is to ensure that students feel a special relationship with their journal. The fact that students create their own journal is one way that I like to begin to build this special relationship. In my classroom, the field journal is the only notebook that students design, make and bind all on their own. Right from the get-go they are less likely to scribble in it or lose it for this reason. Before we even create our field journals, however, I like to begin with a conversation about what it means to be a scientist. As I said, there are many ways to introduce field journals, but I will walk you through what a sample conversation might look like for me in my classroom.

- What is a scientist?
- What kind of scientists are there?
- Do scientists already have all the answers?
- How do scientists make discoveries?
- Are we scientists then, too?
- How are scientists like investigators?
- Can we also be solving mysteries and looking for answer?
- We will be nature detectives!

That might be the end of that conversation and we might get enthusiasm going by doing something like looking at skulls or some nature artifacts. A day or two later, we will have a conversation about the tools that an investigator/scientist/detective uses.

- What kinds of things might an investigator use?
- Yes, a magnifying glass...they look carefully for clues. Nothing is too small or too gross for them to take the time to look at.
- They record their observations. When we go outside as nature detectives, we will need to do the same thing. And we will need somewhere to record our detailed observations.
- A field journal is the perfect place. It is the most important scientific tool of all. It will be yours forever.

Tell story about geologist and class reaction to his field journal.

Questions?

### **When and How to Use Field Journals**

This is what a typical field journal “kit” looks like in my classroom.

(Show ziplock bag, sit-upon, pencil and sharpener, eraser, magnifying glass, picture frame.)

This kit goes with each student every time we leave the classroom as a group the entire year. We use our field journals during a walk around the school, we use them at the museum, we use them at Bird's Hill Park, we use them frequently and we take good care of them.

Here are some of the ways I've used field journals in the past:

- Diagrams, sketches, notes, observations, poetry, questions, rubbings, small artifacts, charts and tables, answers and discoveries
- While working at camp, we created an edible wilds guide (which I'll talk more about later)
- Last year, with our water sampling, we recorded our results and brought it back to create a class wall of analyses for water quality

You don't need to go far to use a field journal. As Richard Louv points out in *Last Child in the Woods*, you don't need to go to a national park in order to experience nature. It can be as simple as a school yard, a ditch, a single tree or a nearby green space. I am a big advocate of teaching children to be aware of and appreciate nature before preaching at them to conserve it. Of course recycling, conservation and all the rest are important, but at a grass roots level, children have to have personal experiences with nature before they are invested enough to want to respect and protect it. A field journal can help with this. Most of the activities we are going to discuss and experience today are not "green" activities. They are simply activities that get children to engage with the natural world around them and to record their experiences in a meaningful and personal way.

Here are some samples of field journals. Explain each one briefly.

Now we will assemble our field journals and make our recycled paper covers.

### **Leaf hunt—(5-10 min.)**

### **Paper Making—(15 minutes)**

Demonstrate paper making. Split into two groups. One group assembles pages with twine while other group makes paper...then switch.

### **Sample Activities—(40 min.)**

Field journals can be used for a variety of structured activities or for reflections on a field trip. Here are some ideas of awareness activities to get students started as “nature detectives” and to increase their awareness of the natural world around them.

**Sound Map**—compare several different locations and discuss sound pollution

**Micro-Study**—use markers to sample the diversity in a variety of locations and discuss implications...**micro-hike** as a language arts variation!

**Spiders in the Schoolyard**—search for spider webs (use black paper as a backing), sketch and research the diversity of spiders that live in your area

**Field Guide Creation**—observe the plants and animals in your local area, take notes and research them using a field guide

**Bird Blind**—Sit quietly and observe the various adaptations of birds...have students record colours, shapes, habits and patterns of flight

**Sit Spot Poetry**—Have students find a quiet place to sit alone and write down what they see hear, smell and feel...remember to have them look up, down and all around

**Nature Scavenger Hunt**—students find, collect or sketch items on a nature list

**Match That Colour**—have students find various objects in nature and use pastels to try to blend and match the colours around them

**Human Camera**—Have students play the partner game “human camera” and then have them sketch details from the world around them using a small frame to zoom in on their subjects (they can also use their hands as frames)

**Bark and Leaf Rubbings**—blindfold children and have them “meet a tree”. Afterwards, have them take bark, twig and leaf rubbings, sketch the tree and describe it in detail (ID it in a guide book later).

**Through the Magnifying Glass**—have students sketch tiny artifacts using a magnifying glass—aquatic insects, the insides of flowers, snowflakes collected on black paper outside in winter

**Edible Wilds**—collect only if you are comfortable in your botanical knowledge

**Tracks and Scat**—some of the best evidence of animals comes from these things that they leave behind. Take measurements, look near water (mud) or in fresh snow, don’t be afraid to look inside scat to learn about animal diets and digestive systems. Just use a stick and be sure to wash your hands after!

**Visit and Revisit Again and Again**—take students back to the same place on consecutive days or weeks...or in consecutive seasons. Record observations, make sketches, and consider the changes occurring as the forces of nature take their course. *\*Returning to the same place is very valuable. It is often overlooked by teachers.*

Try out a few activities.

Questions.

The end.

### **Materials—**

Sample field journals

Paper making equipment

- Recycling paper
- Screens and sponges (fix?)
- Leaves
- Blender
- 2 big containers for water
- 2 containers with lids full of recycled paper and water (overnight)
- Big pieces of cardboard

Handouts?

Pre-punched paper

Fasteners

Pencils/sharpeners

Scotch tape

**Thursday Night**—bring home recycling paper, blender, 1 container, cardboard, pre-punched paper, fasteners, pencils/sharpeners and Scotch tape, paper making equipment, sample ziplock bag with sit-upon, magnifier, pencil, sharpener and journal, frames, twine, class field guide.

**Friday morning—set up containers of water and blender w/ pulp**