

Learning Plan: Nature Journals

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Introduction & Purpose

Grade: 7

Length: 1 month (with extensions to a whole year)

The purpose of this Learning Plan is to explore our relationship to place through observation, documentation, and story. It centres the use of Nature Journals (aka Scientific Sketching Journals) and incorporates English Language Arts, Science, and Visual Arts curriculum. Since this experience incorporates multiple subjects, we would hopefully be able to commit lots of our time each week for all the various aspects. This Learning Plan is only the beginning of the use of Nature Journals in our class, as the intention would be to continue to use them for the rest of the year. However, for this Learning Plan I am focusing mainly on their introduction, as I think this requires the most forethought and planning. I also briefly outline a culminating event at the end of the year that we could share with our community.

Nature Journals would be first introduced at least 3-4 months into the school year, to provide time to gather up our required prior knowledge. In the first few months of school our English Language Arts (ELA) will have included the basics of storytelling, such as features of oral language, strategies in oral language, and exploring First People's and other culture's oral language traditions. This will have been done through reading specific books out loud to each other, listening to oral stories, watching videos of storytellers, and ideally having storytellers come into our classroom. Debrief and discussion on all these experiences is also key. Students will also have had basic experience with ideas in Science of evolution, natural selection, biodiversity, geologic time, and climate change. Note that covering these topics in ELA and Science will continue through the Nature Journals, with the purpose of adding depth and personal connection to the student's prior knowledge. Much of the Art principles and strategies listed below will be introduced for the first time with Nature Journals.

English Language Arts Big Ideas

- Exploring stories and other texts helps us understand ourselves and make connections to others and to the world.
- Exploring and sharing multiple perspectives extends our thinking.

English Language Arts Curricular Competencies

- Create and communicate: Use and experiment with oral storytelling processes
- Create and communicate: Transform ideas and information to create original texts
- Comprehend and connect: Synthesize ideas from a variety of sources to build understanding

English Language Arts Content

- Story/text: Literary devices (sensory detail, figurative language)
- Strategies and processes: Oral language strategies
- Language features, structures, and conventions: Features of oral language

Learning Plan

Environment: This experience takes place mostly outside, with parts of the activities happening in the classroom. Prior to the introduction of Nature Journals, as a class we will have sought out a “wild” place nearby (within 5 minutes walking distance from our classroom). Ideally it would be a natural forested area, but it could also be a public park with landscaping or our school yard with some vegetation. We will have spent time in this space, doing a variety of activities to get to know the space on a basic level (knowing big landmarks, exploring different ways we can engage in the space, finding favourite spots, etc.). We may have also researched the history of our chosen “wild” place.



Curricular Integration: Through using Nature Journals and engaging in discussions that arise, students will explore content from Science 7 such as evolution, survival needs, natural selection, and changes to biodiversity over time, including ideas of geologic time, fossils, and climate change. By using the various activities and techniques in Nature Journaling students will also practice image development strategies and principles of design from Arts Education 7, specifically elaboration, repetition, simplification, pattern, emphasis, movement, and proportion. There are also many curricular competencies from both Science and Arts Education that will be met. First People's perspectives, especially related to oral language and relationship to the environment, will also be a big part of student's explorations through this experience.

The Process: Once we have a relationship to our “wild” space, I will introduce the idea of Nature Journals to the class. This will include looking at a large variety of samples, including historical examples, adult created, and kid created (see attached examples on the last page). We will talk about the purpose of a

Nature Journal (observation and documentation of the world around us) and the other things that come with this practice, such as slowing down, deepening our experiences, embracing mystery, and intentional curiosity. I will introduce the components of a Nature Journal, including visual documentation (drawings) and written observations. We will brainstorm a list of all the elements we could include on a page (eg: date, time, location, questions, sensations, counts, arrows, and many more...). Also see the Assessment section below for the process of co-created criteria for our Nature Journals. We will then create our Nature Journals (there are a large variety of formats that can be used, and students will have the choice to pick their own style) and do a simple ‘observe and document’ activity in the classroom, to give the students an idea of the process.

Our next discussion, before setting off on our adventures, will be around storytelling. I will tell the students that we will be using our observations, documentation, and experiences with our Nature Journals to create an oral tradition in our class centered on our “wild” place. We will review all that we have learned about oral language and storytelling. Also see the Assessment section below for the process of setting oral language goals for our storytelling.

Once we have the basics of both Nature Journaling and storytelling from our explorations, we will start taking our Nature Journals to our “wild” spot. Ideally this would happen every day but could potentially happen 1-2 times per week. Each visit to our “wild” place will start with some type of grounding ‘we’re here’ activity. This could be a 5-minute silent ‘sit spot’ or the telling of a story. Next we would get out our Nature Journals and discuss the focus and activities of the day. In the beginning, I would choose a few introduction activities to get the students used to the process. After students have been exposed to a variety of Nature Journaling options, “free choice” can also be an option for students.

A focus can be a variety of things linked to the curriculum. For example, we could look for patterns across species (Science) and a student could notice the organization of leaves on a stem is the same for two plants that otherwise look very different. Either I, the student, or other students could take this observation and have a discussion about evolution and survival needs – why are the leaves that way? Are the two plants related in some way? Could it be convergent evolution? Alternatively, our focus could be movement (Art) and a student could observe and document the way branches of trees move in the wind, finding ways to convey this movement in static 2D space. All of the Science and Art curriculum described above in the Curricular Integration section could be explored in this way, by both student discovery and my leading prompts and questions to the students. Some leading questions to the group that can help us choose our focus for the day;

- What do we want to notice today?
- What are we wondering about?
- What did we discover last time that left us with more wonderings to explore today?
- What have we already seen today that makes us curious?

There are some excellent resources out in the world for specific activities for Nature Journaling. I will have a bunch of these activities in my back pocket each time we visited the “wild” place and take



the student's lead in what they might be interested in exploring that day. A few examples: focus on an individual, focus on the species, zoom in-zoom out, changes over time, record an event, or make a map. See Useful Links section below for a list of resources.



After our discussions we then take our Nature Journals and supplies and wander until we find something the we want to observe and document. We would spend at least 20 minutes observing and documenting (though hopefully more depending on our schedule).

For the second half of our block we will gather back together. The goal for this time is to use our oral language skills to tell the story of our experiences that day. Pulling on our observations and documentation that we did in our Nature Journal

we will try to tell the story of our experience. Not everyone will share each time, but we will try to rotate through the entire class so that everyone gets a chance to share a few stories. We will have discussions about our storytelling goals, as well as stars and wishes for each storyteller (see Assessment section below). Part of this will be continuing to discuss the features of oral language and storytelling. As the month progresses, we can start to talk about metaphor and symbolism in oral traditions and try to start including both in our own stories. Storytellers are also welcomed to weave their peer's stories into their own. My hope is that there become favourite stories about our "wild" place that we tell over and over again, with each person bringing something different to the same story. We will gather our stories, allowing them to shift and change over time, with our main goal of creating The Story of our relationship with our "wild" space and our history in that place.

At the end of the month (and each month for the remainder of the year) we will have a class gallery walk to showcase our Nature Journals. Each student will pick 1-2 pages in their Nature Journal from the last month that they enjoy the most and write a short description of why they picked these pages to highlight for others to see (this could be incorporated with the self-assessment process as well, see Assessment section below).

At the end of the year, we will have a community event (hopefully in our "wild" space if it is possible) where we invite our community to share our experience. We will have our Nature Journals on display, with each student picking a few favourite pages to highlight from the whole year (with descriptions). We will also tell our favourite stories from the year, with the hope that each student participates in the telling (either telling a whole story or part of one). Documentation and descriptions of our process will also be present.

Materials: Students will need a variety of drawing materials that can be used outside. Having a variety of types of paper (including waterproof paper), pencils, pens, and pencil crayons will allow the students to have a wider range of creative options. We will also need a variety of materials to make the journals, such as stapler, twine, card stock, etc. Depending on funding options I could also provide spiral bound sketchbooks if students wanted them. Other helpful materials in the field would be clipboards, magnifying glasses, binoculars, rulers, erasers, sharpeners, etc. Water colours could also be used, depending on student interest. I would bring a small selection of field guides (plants, animals, geology, etc) for students to use each time we visit our "wild" place. Rain gear is a must for students to feel able to sit/lay anywhere in any weather while observing and documenting!!

Adaptations

Students who struggle with fine motor skills and who might find the detailed documentation difficult could pair with a friend and they could observe and wonder together, with the friend documenting their shared thoughts in a shared journal. Some students may also have trouble with the long periods of observing and documenting (20 minutes or more). One option could be for students to do “quick” observations and documentation of the same thing in multiple different places, moving every 3-5 minutes around our space.

There may arise the need to have conversations about art and comparison to others, depending on the group of students. My goal would be to help students identify ways they can focus on their own growth over time instead of one-point comparisons to other's work. This may only be needed on a one-to-one basis with specific students in the class. Helping them all set clear goals for themselves around their growth, with a focus on one or two goals at a time, could potentially help with this. This may also occur with the storytelling aspect, with discomfort in speaking in front of others. Encouraging kids to meet themselves where they are at, and letting them know I am doing the same, would be key to providing them a safe place to orally share with their peers. In some circumstances, written work could be read out loud to the group by me or a peer.

Extensions

Students could take their Nature Journaling and storytelling skills to their own spaces, near their homes or in their neighbourhoods. If a student was travelling with family during the year (as often happens with a few students each year) they could use these skills to create a Travel Journal that involves documenting their experiences and observations through words, drawings, and story. This could be incredibly rich if they were visiting a culture very different from their own. I could encourage them before they go to “seek out the stories” that are embedded in that place and to add their own stories of their journey.

Students could create multiple different Nature Journals for different purposes based on their own interests in observing the world around them (eg: perhaps they want to map out the school ecosystem and observe and document social interactions – be a sociologist!!). For students who may already have lots of experience with drawing techniques, I can give them the *Laws of Nature Journaling* book, as it contains an extensive amount of detailed instructions for drawing things in nature (for example: specific techniques for shading different tree bark textures or drawing transparent wings).

Students could also do more research into the history of our “wild” place. This could include utilizing resources outside the school, such as the BC Archives, our local library or museum, or local knowledge keepers in our community.

Assessment

I am a big fan of co-created assessment criteria and self-assessment and would use both of these for this Learning Plan. After the introduction of Nature Journal samples at the beginning of the month I would have a discussion with my students about what they think is important in a Nature Journal. Together, we would co-create some criteria for what makes a good Nature Journal. Once the students had started their own Nature Journals and had time to work on them, we would revisit this list to see if

we wanted to add, remove, or alter any criteria. At the end of the month I would have the students do a self-assessment of their Nature Journal based on our co-created criteria. I would also include a section for “What I want you to notice.” For the storytelling aspect of this experience, I would want a more on-going feedback process for assessment, so that students could improve on their oral language skills over the course of the month. Again, the process would start at the beginning of the month with all of us thinking back to what we already know about features and strategies of oral language. We would talk about our strength and challenges with storytelling. I would then have each of us (including myself) set one goal related to a challenge we have with storytelling (mine might be “talking at a slower pace when telling a story, including using pauses for narrative emphasis”). During our storytelling time we can practice giving ‘stars and wishes’ to each person who tells a story, with the goal that some of the feedback is related to the person's oral language goal. At the end of the month, during our self-assessment, we will review our oral language goals, and pick evidence to show our progress on the goal (eg: when I told the story about the eagle people commented on how I used dramatic pauses at the end of my story).

To assess students on all the aspects of the experience I would use both the co-created criteria and the student’s own self-assessments. I would provide students with my anecdotal feedback of both the final product (the Nature Journal to date and any stories they’ve told) and my observations about their process over the month (I would have been taking observational notes through out). If needed, I would provide them with a grade or assess them on the Proficiency Scale based on our criteria and the curriculum competencies (depending on my school and District).

Useful Links & Resources

Nature Journals

The Laws Guide to Natural Drawing and Journaling by John Muir Laws – lots of activities to use, plus some great resources pages to print out for students to use while journaling.

John Muir Laws Nature Journaling Curriculum – by the author of the above book, even more activities specifically for children - <https://johnmuirlaws.com/journaling-curriculum/>

Smithsonian’s Introduction to the Nature Journals – a wonderful and beautiful source of activities
http://www.smithsonianeducation.org/educators/lesson_plans/journals/smithsonian_siyc_fall06.pdf

Keeping a Natural Journal: Discover a whole new way of seeing the world around you by Clare Walker Leslie and Charles E. Roth – another resource for activities

How to Be an Explorer of the World: Portable Life Museum by Keri Smith – an excellent resource for encouraging curiosity.

Storytelling

Indigenous Storywork by Jo-ann Archibald – a resource for teachers on incorporating the aspects of Coast Salish storytelling into your classroom

Activating the Heart: Storytelling, Knowledge Sharing, and Relationships by Christopher Cox, Lisa Szabo-Jones, Julia Christensen – a resource for teachers exploring storytelling as a way of knowing

Keepers of the Earth: Native Stories and Environmental Activities for Children by Michael J. Caduto and Joseph Bruchac – wonderful stories and related activities

First Nations Education Steering Committee – a great source for reviewing books for authentic Indigenous perspectives and content - <http://www.fnesc.ca/>

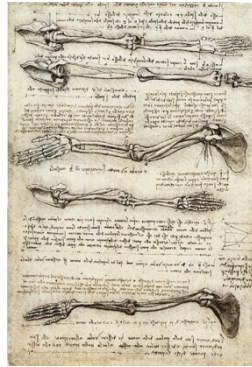
Samples of Nature Journals

There are *many* wonderful examples to be easily found on the internet. Here is just a sample;

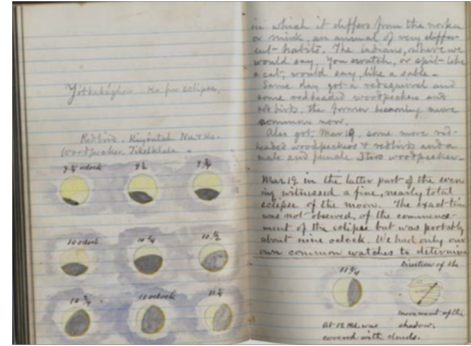
Historical Examples



Washington Henry Ochsner



Leonardo Da Vinci

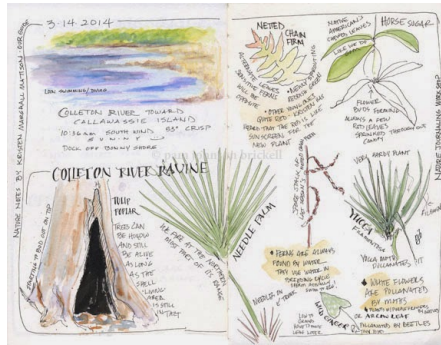


William Healey Dall

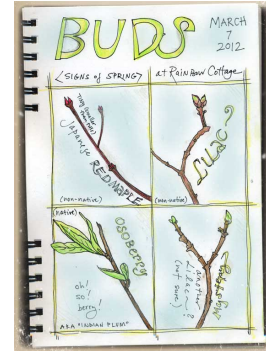
Modern Examples



Lynn Seddon

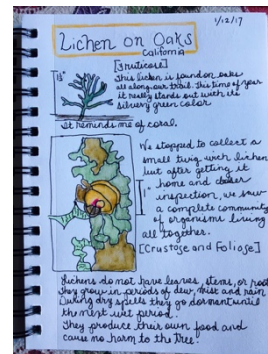
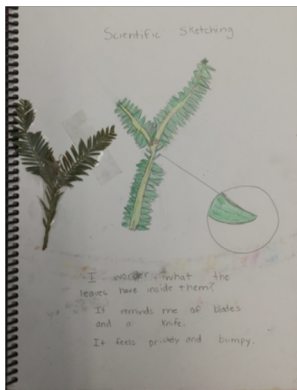


Pam Johnson Brickell



Joanna Powell Colbert

Student Examples



Student examples taken from teacher's lesson plans found online