# Amazing Alaskan Animals

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**Program Outline: Amazing Alaskan Animals**

**Goal: Children learn how to cooperatively write a comprehensive research report. The program addresses the following ELA and Science Standards:**

**ELA Standards**:
E1c Read and comprehend informational materials
E2a Produce an informational report
E3b Participate in group meetings
E3c Prepare and deliver an individual presentation
E4a Demonstrate a basic understanding of the rules of the English language in written and oral work
E4b Analyze and subsequently revise work to improve its clarity and effectiveness
E5a Respond to non-fiction and fiction using interpretive and critical processes
E5b Produce work in at least one genre that follows the conventions of that genre

**Science Standards:**

S2a Demonstrate understanding of characteristics of organisms
S2b Demonstrate understanding of life cycles of organisms
S2c Demonstrate understanding of organisms and environments
S5f Work individually and in teams to collect and share information and ideas
S6a Use technology to gather data
S8d Demonstrate scientific competence by completing non-experimental research using print and electronic information

**Grade Levels:** 2-6



**Timeline:**

Anywhere from 4-9 weeks, depending on frequency of the lessons and ability of the group. Immersion may be done in 1-3 weeks and writing and art in 3-6 weeks.

**Overview:**

Children are immersed in a study of Alaska and focus on Alaskan animals and their adaptations to the environment. They learn note-taking skills while listening to non-fiction books about Alaska. A shared reading of realistic fiction about sled dog racing motivates them to learn more about other animals. Pairs of children choose an Alaskan animal to study. Computers, books, and magazine articles are used to gather information, and students are taught in a series of mini-lessons how to write a simple research report. They also create a "big book" as a class project that includes the information from their individual reports.

This program was done with a group of 21 third graders of average ability level. It can be adapted for lower or higher grades and various ability levels.

**Materials Needed:**

Required materials include computers with Internet access, a word processing program, assorted non-fiction books and articles (National Geographic for Kids, Scholastic News, Time for Kids, Ranger Rick, etc. are all good), a class set of the book *Silver* by Gloria Whelan (or one book if done as a read aloud), chart paper, and highlighters. Art materials may include kraft paper, large oaktag sheets, Craypas, assorted tempera paints, construction paper, yarn, a hole puncher, and paint brushes.

**Mini-lesson time frame:** A mini-lesson should not run more than 15 to 20 minutes. (Ideally, it should take 10 minutes.) Children's work time is usually scheduled for 30 to 45 minutes, including a share time at the end.



## Table of Contents



Part I: **Immersion: <u>Fiction Reading about Alaska</u>**

Immerse your students in Alaskan culture by reading folktales aloud daily. (See Bibliography for suggestions.) In addition, do a shared reading of *Silver* by Gloria Whelan. With this realistic work of fiction, children will understand that:

- People and animals must adapt to their environment.
- Every member of any community is a unique individual.
- Interdependence is necessary to meet the needs and wants of family members.
- Lifestyles in a community are influenced by environmental and geographic factors.

During the reading of *Silver*, to encourage debate, children can discuss the following statements that have been developed. They are listed according to the five social studies strands. Children should be able to substantiate their responses with evidence from the text:

**Geographic:**

- A cold climate influences the way a family lives.
- Life is more difficult in a cold climate.
- Dog sled racing is made difficult because of Alaska's geography.
- Dog sled racing is popular because of Alaska's geography and climate.
- Alaska's methods of travel are affected by climate.
- Climate affects the jobs people hold.

**Social:**

- Family members are dependent on each other.
- People try to direct their lives in order to help their dreams come true.
- Long winters can be depressing.
- People enjoy competition whether they win or lose.
- Pets can take the place of human friends.



**Economic:**

- People make decisions based on economic need.
- Not all rewards need to be materialistic.
- It is more important to do something you enjoy than to do something just for the money.
- People do what they must to support their families.
- Dog racing is costly and does not always provide an income.

**Political:**

- School children must abide by school rules.
- Some communities make specific laws to accommodate dog races.

**Historical:**

- Children often aspire to do what their parents do in terms of a career.

Children learn about the Iditarod and dog sledding through this fictional account. How do dogs survive the grueling Iditarod race? In early March, they follow the mushers and dogs using www.iditarod.com. There are many opportunities for prediction (who will win?) and graphing (who is in first place? How many miles have they run?) as well as other math and language arts activities.

After reading and discussing the fictional accounts, they begin their non-fiction study. This involves reading skills and leads into writing skills. The non-fiction unit is taught through many mini-lessons that help the children complete their own research reports.



Part II: **Immersion in Non-Fiction Reading**

During this part of the immersion process, children should have non-fiction books to read independently. They may also read magazines or newsletters (Ranger Rick, National Geographic for Kids, Scholastic News, Time for Kids, etc.) As they listen to the non-fiction book *Alaska* by Dennis Fradin, children should notice the similarities and differences between fiction and non-fiction.

**Non-fiction Reading Mini-lesson #1: What makes a book non-fiction?**

*In* Silver *we were able to learn a lot about dog sled racing in Alaska. As I read aloud to you from this non-fiction book, notice how the author gives us information.*

After reading a few pages, children should turn to a partner and discuss what they've noticed so far about the information in the book. A chart listing some characteristics of non-fiction that the children noticed should be created.

*When you sit down to do your independent reading, see if you notice any of the characteristics of non-fiction that we charted and see if you find any other interesting noticing.*

After the independent reading session, children share their findings and add to the chart. Some of the things the children should notice are: table of contents, real photos, headings, chapter titles, glossary, diagrams, sidebars, captions, bold or italicized print, charts, etc. As a follow-up to this mini-lesson, the children are grouped together and receive three or four books to explore. They list the feature, title of the book, where it's found in the book, and how it's used or what it does.

**Non-fiction Reading Mini-lesson #2: How can we increase our comprehension skills in non-fiction reading?**



*A good reader will usually think about what they are reading. You might think of something personal, how it makes you feel (emotion), another book you've read, or maybe even things you know about in the world. Today, as I read a few more pages of* Alaska*, see if you can make some connections and jot them in your reading notebook.*

After the reading, children share jottings with each other.

*During your independent reading, write some of your thoughts about your reading on post-its and we will share them together.*

After independent reading time children come together and share their thoughts*. How does the connection help you understand your book?*

**Non-fiction Reading Mini-lesson #3: What do you do about difficult words in your reading?**

*Many times, when we read non-fiction, we come across words we may never have seen or heard before. Today we will talk about strategies we can use while reading non-fiction.*

The teacher should read aloud a non-fiction piece (from National Geographic for Kids, Scholastic News, Time for Kids, etc.) and notice how difficult words are highlighted. Find the glossary and you will know the meaning of that word. Sometimes a sidebar is used to define a word. Chart some of the strategies to use and look for while reading through a few select paragraphs of chosen articles for this lesson. The following are some of the strategies that the children may find helpful:

- Notice a word and then commas following with an explanation of the word.
- Try to cover the word and use another word that might make sense in that sentence.
- Reread words, phrases, or paragraphs around the unknown word to see if you can make sense of it.
- Read on to see if the word is explained later on.
- Look for familiar words in the word you are having trouble with.
- Find prefixes, suffixes, or roots to help you figure out the word.



*As you read independently today, think about some of the strategies we discussed. Use Post-Its for words you had trouble with and list the strategy you tried.*

During share time, discuss words and strategies that children used.

**Non-fiction Reading Mini-lesson #4: How can we tell what's important in our non-fiction reading?**

*When we read and research a topic like Alaska, we don't want to write down every word that the author tells us. One way to avoid this is by reading a few paragraphs, stopping, closing the book, and then retelling what we read. We can then jot down what we remember.*

Model this strategy with a few paragraphs of *Alaska*. Make sure to discriminate between interesting details and what's really important.

*Notice the important points we jotted down. Turn to your partner and see if you can plan a "retell" together. Share.*

Chart what a non-fiction retell should include:

- It should make sense.
- It should tell the main idea.
- It should include <u>some</u> important details.

*As you read independently today, stop after a few paragraphs, jot down some important points on a Post-It and see if you can retell.*

Meet for a share and have partners share their retells.

Now that we have completed our immersion in non-fiction reading, we will make the connection to the children writing their own research reports.



**Part III: Connection: <u>Writing A Research Report</u>**

**How do we research an Alaskan animal?**

Children are assigned partners (or can choose their own partners) 2 or 3 to a group. They choose one Alaskan animal to research. There are many possibilities. List animals that you wish for them to research on the blackboard and assign 2 or 3 children to each animal. Use your judgment in assigning groups based on ability, behavior, cooperation, etc. The following animals are some you may wish to consider: snowshoe hare, arctic tern, puffin, walrus, polar bear, beaver, snow goose, grizzly bear, humpback whale, arctic fox, moose, snowy owl, dall sheep, and caribou.

**Writing Connection Mini-lesson: Where can we find information about our Alaskan animal? What resources can we use to find information for a report?**

In discussing the above questions, children will come up with a list that you can chart. Include Internet, non-fiction books about specific animals or about Alaska, people they know who have visited Alaska, encyclopedias, etc.

Give children a time limit for collecting information. (A weekend might be feasible.) Have them bring in any information they find. Each group is given a pocket folder in which to keep any sheets and notes. You may also want to bring in any information or simple books you can find in the library or Internet information (see bibliography). Once children have some information to work with you can start making the writing connection.

Prior to writing mini-lesson #1, you may want to discuss the scientific idea of "life cycles" and "adaptations." You can read and discuss a simple book about how butterflies start as eggs, hatch into larva, become caterpillars, form chrysalides, and finally become butterflies. This is an example of a life cycle that many children may



be familiar with. For adaptation, children need to understand that some of the animal's physical characteristics help them survive the cold and icy climate. Discuss the different coverings that animals can have (scales, fur or hair, feathers, smooth skin, hard shell, thick skin), and how these coverings help the animals live in their environments. Discuss which animals would have each covering and how each covering meets the needs of each animal living in a particular environment. (Smooth skin—amphibians; scales---reptiles; fur or hair----mammals; hard shell---snail; thick skin---elephant.) *What is special about your animal's body that helps it survive in Alaska?*

**Writing Mini-lesson #1: How can we take notes about our non-fiction reading?**

*Do you remember how we read and retold information about Alaska? Today we will learn to use a T chart to help us better remember and understand what we read. On the T chart we will record facts on one side and thoughts about these facts on the other side.*

*Fold your notebook paper in half and write the name of your animal at the top, middle of the page. Now label the left column "Facts" and the right column "Thoughts". Let's try it together.*
Read a short passage about one animal. For example, your reading may include a fact like, "the walrus has the best creature mustache." Thoughts then might include "Why would a walrus need a mustache? Or "I know many people that have a mustache. I wonder how or if it helps them in some way?"

*Today as you read through your notes, work with your partner and list facts on one side and what you think about those facts on the other side. Think deeply. Writing the words "that's interesting" is not an acceptable thought. We will be thinking a lot about what these animals eat and what eats them, their life cycle, how they adapt to their environment, and what these animals look like. See if you can find facts about these topics.*



List topics on a chart for the children to refer to. After 20 to 30 minutes, come together to share some facts and thoughts. Do this fact-finding session again for 2 or 3 more days.

**Writing Mini-lesson #2: How can we divide our facts into topics and bullet each fact under the correct topic?**

*Yesterday we collected some more facts and thoughts. You should now have many facts and thoughts on your T charts. Today we will start organizing our information. In your notebook, we will use four pages. Each page will be for one topic. Label one page "How the Animal Looks"; label the next page "Life Cycle"; label the third page "Diet", and label the last page "Adaptations". When you go back to work with your partner, read through your facts and decide which page each fact belongs on. Rewrite the fact on the correct page under the correct heading. These facts are "bullets". If you have a fact that does not fit any of the topics, leave it and don't record it.*

Demonstrate briefly with one child's notebook. Let children get to work and walk around to help them. At the end of the session, get together and share a successfully completed topic page. You may need to do this for one or two more days.

**Writing Mini-lesson #3: How can we write a first draft using the information we have?**

*You should now have four pages with information about your animal and you may be ready to begin your first draft. Open your notebook to the first topic page ("how the animal looks").*

Demonstrate by having one child read through the notebook page aloud. Have the child close the notebook and ask the children to tell about the facts they heard. Record these responses on a chart. Organize this information into a paragraph with the input of the class.



*Now, you will work individually and read your first page, close the notebook, and write a first paragraph on your draft paper. See if you can do this for each topic page you have.*

Share successful attempts. (This will take 3 to 4 days.)

**Writing Mini-lesson #4: How can we stretch our writing?**

*Let's take a look at our first drafts. Is there anyone that has a topic with very little information? Today we are going to look back and see if we can use some of the thoughts we had about the facts we listed (remember the T chart?) and we will use those thoughts to help us write more about a topic.*

Demonstrate this concept using one child's draft and going back to the T chart to notice his/her thoughts on the facts included in this topic. For example, remembering back to the fact that a walrus has the best creature mustache, you may recall the thought that perhaps this helps them in some way. You can simply include this thought in the writing or find some more information about what the mustache is used for and include that information.

*As you work on your drafts today, see if you can find some areas where you might want to use this strategy to help stretch your writing.*

After this writing session, share some of the ways that children were able to stretch their writing.

**Writing Mini-lesson #5: How can interesting headings make our writing more exciting to read?**

*The drafts we are working on are organized by headings: what the animal looks like, diet, life cycle, and adaptations. To make our reports more interesting, we may want to think of headings that will make the readers want to read on. Let's look at some headings in this article and how the headings work.*

Read a heading and some of the following paragraph from an article you have chosen.



*How did the heading make the article interesting? What were you able to predict from the heading?*

Children should notice that:

- The heading gets your attention but also tells what the paragraph should be about.
- All sentences in the paragraph deal with the topic.

*Now turn to your partner and discuss what your heading might be and what your paragraph might sound like. (Share one with the whole group.)*

*When you return to work on your report today, try to come up with some interesting heading that will make your reader keep reading.*

After writing time, share some of the headings children were able to come up with.

**Writing Mini-lesson #6: Can diagrams, charts, and tables help others better understand our reports?**

*As you know from some of our math lessons, charts and tables can help someone better understand information. Diagrams can also be used to help a reader become clearer on the written information. Let's look at how some authors use charts or tables or diagrams in their non-fiction articles to help the reader understand what they are writing in a different way.*

Show children charts, tables, and diagrams from appropriate non-fiction articles. Discuss.

*Think about how you might want to use a chart, table, or diagram to make your non-fiction information very clear to the reader. Turn to your partner and discuss where you might want to add a diagram, table, or chart in your report.* Share a few discussions.

*When you go back to your writing today, see if you can add a chart, table, or diagram to your report.*

When children are done, share some of the work.



**Writing Mini-lesson #7: How can we add an interesting beginning?**

*So far in our drafts we have four headings with information, and maybe a chart, table, or diagram. Today we are going to work on a beginning paragraph for your report. As you remember from other kinds of writing we have done, the beginning of your story is an important part. Beginnings can grab a reader and make him want to read more. Today we will look at how some authors have chosen to begin their articles.*

Read aloud 3 or 4 beginnings of feature articles from an appropriate magazine. *As I read these excerpts, think about how the author has grabbed your attention. Write some of your ideas in your notebook.*

Discuss some of the ideas for good beginnings and chart them:

- Painting a scene with words.
- Starting with an interesting fact and adding a thought.
- Asking a question.

*When you go back to work on your report today, see if you can add an interesting beginning. Try one of the suggestions we discussed.* Allow children to work on this and share their beginnings after the writing session ends.

**Writing Mini-lesson #8: Do our reports make sense? Editing for sense and grammar/punctuation.**

*We have spent a while drafting and revising our reports. Today we need to look over this writing to make sure there are no mistakes.*

*We will look for:*

- *Capital letters at the beginnings of sentences.*
- *Periods or question marks at the ends of sentences.*
- *Correct spelling.*



Demonstrate how to highlight errors using a paragraph on the overhead projector. Read through the paragraph with the children and highlight the errors.

*Work with your partner and read each other's drafts. Use your highlighter pen to highlight any mistakes you find in each other's reports. When you get your report back, start making corrections on your draft. When you think you're done, you can use the editing checklist I will give out to you.*

Your editing checklist may include:

Report

1. Do I have a good beginning paragraph?
2. Do my paragraphs following each heading make sense with that heading?
3. Do my headings catch the interest of the reader?
4. Do I have related diagrams, charts, or tables?

Grammar

1. Do I have capital letters in the right places?
2. Do my sentences end with the correct marks (period, question mark, or exclamation point)?
3. Is my spelling correct?
4. Are any words missing?
5. Did I remember to indent my paragraphs?

After this session, ask two or three students to share some of the errors they found and explain how they corrected them.

**Writing Mini-lesson #9: How will we publish our work?**

Children will work on the computer (any word processing program you have will be fine) to publish two copies of their report. One copy will be stapled between two pieces of



construction paper. The cover of this booklet is decorated by the child with an illustration depicting the Alaskan animal he he has researched, as well as a title and the student's name.

There were four computers in the classroom. Children were given specific times to work on their reports. I did the final editing, since some of the children were not adept at word processing. After all the reports were completed, children used the second hard copy to cut and paste after they had decided with their partner which parts they would put in the big book. They literally cut out the sentences and glued them onto rectangular pieces of black construction paper.

*Today we will look at all we wrote and partners will decide which introductions, headings, and information they want to use for our big book. Let's form a circle around one set of partners and listen and watch as they decide what to do. (This is a fishbowl technique that can be used during many mini-lessons.)*

*Now work with your partner and make your decisions about the introduction, headings, and writing you will use. You will glue the parts you are using onto black construction paper and we will glue that into the big book on the page with your animal.*

**Part IV: Connection: The "Art Part"**

**This part of the project is done simultaneously with the writing. It should be completed prior to the final draft.**

**Session 1:** (see Writing Mini-lesson 1): Give each child a large index card. On one side of the card, let them draw their animal to the best of their ability. On the reverse side, let them list any information they already know about this animal.



**Session 2:** Use large sheets of butcher (kraft) paper folded in half. Children team up and draw large-scale pictures of their animals on this paper. Cut out the double paper, which now gives you two outlines of the animal. Glue these outlines onto large white oak tag. When you glue the animal outlines, have their heads facing each other on the two oak tag sheets. This oak tag will be used for the pages of your big book.

**Sessions 3 and 4:** Paint the animals using tempera. Use oil pastels to indicate detail features after painting.

**Sessions 5 and 6:** Work on background using construction paper/collage or tempera/oil pastels.

**Sessions 7 and 8:** Assemble pages. Children have glued reports to black construction paper and now will arrange them on the appropriate pages and glue them down (see Writing Mini-lesson #9). Each animal includes information about the life cycle, adaptations, diet, and a physical description.

Work on a front cover and dedication page.

Punch holes through the sides of the oak tag sheets and string the book with ribbon or yarn.



**Part V: Presentations**

Children will read their sentences aloud during the "celebration." Parents and administrators can be invited to view and hear the finished big book and share juice and cookies. You may also wish to "practice" reading the book aloud to a younger aged class.

First, each member of the team should take a turn reading the information about his or her animal in your own classroom. Notice problems that may arise (not loud enough, lack of intonation, rushing through the reading, etc.) Practice until it sounds presentable. Children can comment on each other's oral presentations and come up with a checklist of ideas to improve their oral reporting skills.

**Other presentation ideas can include producing poetry about the animals and making a small book, using a PowerPoint presentation with information from the written reports, and making a mural of animals and choosing information to present with the mural.

**Assessments:**

Children are assessed and self-assess throughout this program. As you walk around during each independent reading and writing session you are continuously assessing each child's progress and taking notes along the way. It is important to jot down conference notes that you may have with each child so that you can remember what you have discussed and, perhaps, add additional mini-lessons to meet the needs of your particular class. Assorted checklists help the children with their own assessments in terms of the writing and oral reporting.



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There are many more books and websites that you may find!