

Place-Based Learning Project Planning Guide

Project Title: Akiachak to Akaroa: A People in Control Project Leader(s): A.

Macomber

Grade Level(s) 4 School Name: Akiachak School School District: Yupiit School

District

Content Areas: Science Arts Math Technology Foreign Language Social Studies
 Other

1. Project Objective(s):

The objective of this project is to work with students to identify harmful human influences on our local environment and work together to fix them.

2. Project Description: Include in your description answers to the following questions: What is the scope of the project; that is, how many teachers, students, and community members do you expect to be involved? Who are your community partners and how are they involved in planning and implementation?

Teachers: Just me!

Students: Just my class! (17)

Community members:

- The trash collector people: Involved in helping students gather data about how much trash gets collected and where it goes in our community
- Our store manager: To help us understand the types of things entering our community
- The Dump Manager: Help us understand how trash gets moved around, where it goes, how long it stays, etc.
- Our aides: Translating
- Parents: Interview and field trip help
- Local industry (school, I.R.A., and store): Provide advertising space

Most of the above met with me (not all parents were present) to plan how they could help the students address the intended area of focus: Pollution.



THE RURAL SCHOOL AND COMMUNITY TRUST

3. Community Connection: How is the project connected to the unique identity of your place (e.g., culture, economy, infrastructure, natural resources)? What makes this a community development project? What specific community need will it address?

This project is incredibly connected to the unique identity of this place! The area I live in, Native/Rural Alaska, hasn't transitioned well from the traditional uses of objects and waste disposal to the current materials present in the community. In the past, everything that was used was discarded casually, since it was made of natural materials, it quickly biodegraded. As Western culture began to have an influence, the first things that were adopted in this area were cloth and metal objects. Metal objects did not biodegrade, but they were well cared for and used for a long time. Cloth could be disposed of in the traditional way; burning. Currently, my village is flush with the influences from the outside. My students walk to school listening to music on their cell phones, wear rubber soled shoes, drink bottled beverages, and watch television on plasma screens. However, the disposal of these goods has not kept pace with their consumption. We have one, sprawling, landfill. Trash coats the village board walks, gathers against the sides of homes, and is frequently floating in the river. Although the State of Alaska has done minor work here educating village members about the dangers of putting oil in the river, nothing else has been done. In an area without indoor plumbing, pollution takes a back seat. However, salmon runs are down, red fox are invading, and the climate is changing. We can't control every aspect of our environment, but pollution is something we can tackle. Most of the village is completely dependent on the health of the river and the natural environment to provide subsistence resources like food and natural medicine. The more polluted our area becomes, the less of these resources can be harvested. It's also important to teach students that their actions have an impact.

4. Essential Question: What is the essential question addressed by the work of the students and community partners?

There are a few essential questions that I hope my students will consider and investigate as we learn together:

- 1) How do my decisions affect my community/environment/others?
- 2) Is it possible to help others make better choices?
- 3) Small things can have lasting impacts ← More of a big idea



5. Student Learning Outcomes and Standards:

Learning Outcomes: What will students know and be able to do as a result of this project?	Standards Addressed: Which learning results or benchmarks do these outcomes address?	Assessment: How will you assess each student learning outcome?
1. Students will understand that an ecosystem is formed of physical features, micro-organism, plants and animals that depend on another and be able to explain how a change to one of these things could potentially affect the entire ecosystem.		
2. Students will create persuasive works to explain, with evidence, why polluting is not a good idea. (Poster, Essay, Slogans, etc.) They will understand the goal, writing style, purpose, and be able to successfully write a persuasive argument that fits the prompt/purpose.		
3. Students will investigate pollution in our village and represent their findings mathematically. They will use appropriate units, measuring tools, survey techniques, interviews, etc. to represent their findings before our plan and after implementation. They will be able to orally explain, write it out, as well as represent mathematically their findings.		
4. Students will understand and explain food chains and the effect that a change in a food chain can have on an ecosystem.		

6.. Literacy Acquisition:

Goals: What specific literacy goals will the project address?	Strategies: What literacy strategies will the project employ?	Assessment: How will you assess literacy outcomes?
Students will research to answer questions that they generate concerning the environmental effects of pollution, learn about our environment, and understand common materials better.	Students will read for understanding, synthesize apply information found in various texts (magazines, newspapers, articles, graphs/charts,	This will be assessed, for the most part, via observation and participation. I intend to use a clipboard to gather evidence and a



	science readers, etc) to formulate hypotheses.	checklist to mark off where I see this evidence.
Finding the main idea.	Students will better understand and be able to locate and identify the main idea which may include finding supporting details, topic sentences, conclusions, etc.	Students will keep Research Record Forms during research periods where they will write down the Title, question they are investigating, main idea of article/details, and whether or not it answered their questions.
7. What 21st Century Skills will students apply and assimilate through this project? How will students demonstrate these behaviors?		
Goals: What 21 st Century skills with students apply?	Assessment: How will you assess 21 st Century outcomes?	
I think that this project most closely has students using the Learning and Innovation Skills –4C’s (Critical Thinking, Communication, Collaboration, and Creativity).	I do not plan to assess 21 st Century Skills. This is something we do in my state or district. However, I do believe that these are incredibly important and will be assessed, for the most part, in the regular assessments for the literacy and content goals.	
8. Technology: What technology tools will the project employ? How will that technology be used to enhance learning and improve on the community issue(s) the project is addressing?		
<p>Students will use PowerPoint and then transfer it as a PDF document to a poster maker to print off their posters. They will type and use publisher to create documents to share. They will research on cell phones (BYOD) and other available devices to answer questions they generate.</p> <p>They will not be using the internet or internet based services (websites, email, etc.) to share with community members. Our community does not have the internet except at school (except about 7 individual residences).</p>		
9. Authenticity: How does this problem connect to the local community OR Where in the “ real world ” might one see the problem or question addressed by the project tackled by an adult at work or in the community? (Ex. Local fish and game scientists also study species in our local creek.)		
<p>This problem connects to the community in a tangible way. Our community is very dependent on local resources for food, fuel, and spirituality, as well as culture. It’s tradition, it’s survival, and it’s life. However, the ecosystem in the environment we are dependent upon is changing. Most of the changes we see are due to human influence. Although it’s nearly impossible to live an impact free life, there are positive changes that we can make to help the surrounding area. A good place to begin is with what we can see: pollution. Discarded paper products, diapers, waste, oil, cars, motor parts, snow machines, etc. all gather throughout the village. These items have a serious and very real impact on our environment. If we fix the problem now, or at least make a difference, it will pay off in years to come.</p>		



10. Adult Connections:

10a. Do students have access to at least **one other adult** with expertise relevant to their project who can address questions, provide feedback, etc.?

Yes No Not Sure

10b. Does the project offer students the opportunity to develop a broader understanding of the relevant field of work through observing adults during at least one in-depth **work site visit**?

Yes No Not Sure

10c. Does at least one adult from outside the classroom help students develop a sense of the **real world standards** for the type of work arising from their project?

Yes No Not Sure

10d. What **roles** will adults outside of the classroom play in this project and how will students **connect** with these individuals? (Ex. Structural engineers will provide feedback to student teams on bridge design.)

Most of the adults in the project are providing students with baseline data for them to work from. For example, our trash folks will help students discover how much trash gets generated bi-weekly. Elders can describe how trash was handled in the past and what it was made from. Our dump people can explain how trash is handled where we are (so that we can make recommendations).

11. Active Exploration: Which of the following **methods and sources** of information are students expected to use in the project? (Check all that apply.)

- Interviewing**
- Observing, documenting, and/or surveying**
- Video or audio-taping
- Gathering and reviewing published information**
- Searching on-line and electronic databases**
- Creating a symbolic representation** (g/g/, model building, map making)
- Discussion**
- Experimentation
- Other**

12. Additional Assessment Information:



12a. Which of the following methods of **self-assessment** of progress are students expected to use? (Check all that apply)

- Journals and work logs**
- Conferences with teachers or adult mentors
- Conferences with peers**
- Using a rubric or other assessment measure**
- Reviewing their progress against a work plan they developed for the project
- Identifying areas where improvement has occurred and where it is needed**

12b. Do students prepare a culminating exhibition, performance, or demonstration at the completion of their project that shows their ability to apply the knowledge and skills they have gained?

Yes No Not Sure

12c. What opportunities are students given to conduct individual, small group and whole class **reflections on their learning** and to offer suggestions for future class projects? [Ex: Small group reflection and whole-class debrief held the day after final exhibition.]

The class will debrief at 3 points during the unit:

- 1) After learning about the environment, our ecosystem, food chains and pollution
- 2) After identifying pollution as a problem and measuring it
- 3) After they put in place their plan and measure it's effects

Please attach any lesson plans to this guide.

