

Creating a Subsistence-Based Curriculum



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What

Subsistence-based curriculum uses the subsistence activities of each season as both the context and the focus of skills development. Students engage in subsistence activities as part of their school routine. Members of the community who have expertise in these areas guide them in the acquisition of subsistence skills. These activities are also to focus of classroom activities. Students read about and research topics related to the their subsistence environment. They keep journals of their activities and these become the sources for further writing and presentation projects. The science of subsistence integrates traditional wisdom and modern technology. Students learn what to gather and how, and they explore the nutritional and medicinal values of the foods their environment offers them. Studying the traditional and current uses of subsistence resources in their village involves students in the practical application of sociology and mathematics.

Students from kindergarten through high school do participate in subsistence activities that are appropriate for their level and physical ability. The target group for total immersion into this approach is the junior high students. This is the age group that traditionally would have been taught the skills necessary to assume the responsibilities of an adult in the community. It is then the purpose of our program that young people be able to demonstrate competence in subsistence skills by the completion of their junior high years.

Why

The main reason for a village school to provide a subsistence-based curriculum is that villages are primarily subsistence communities and traditional skills are still necessary for young people to be able to provide for themselves. Those who assume the responsibility of educating the children of the village must provide them with the skills to live productively and responsibly in their community.

**Culturally knowledgeable students are well grounded in the cultural heritage and traditions of their community.*

The second reason for a subsistence-based curriculum is that this strengthens the students' sense of identity. Students learn their heritage by listening, reading and doing. Their way of life becomes the context in which all other academic skills are learned.

**A culturally responsive curriculum reinforces the integrity of the cultural knowledge that students bring with them.*

The third reason for a subsistence-based curriculum is that it is sound pedagogy. It engages students, teachers and community members in activities that apply all learning to tasks that are real and of high interest.

**Culturally responsive educators incorporate local ways of knowing and teaching in their work.*

Fourth, this approach makes use of the unique resources of the village – heritage and environment. It necessitates parent and community involvement in all aspects of the educational program because they are the experts. It provides the opportunity for students to build relationships with the creatures who share their environment because they interact with their environment on a more frequent and intimate basis.

**Culturally responsive educators use the local environment and community resources on a regular basis to link what they are teaching to the everyday lives of the students.*

Finally, although more demanding than a textbook driven approach, it is certainly more enriching for students and staff because of the diversity of learning approaches and settings it provides.

**A culturally responsive school provides multiple avenues for students to access the learning that is offered, as well as multiple forms of assessment for students to demonstrate what they have learned.*

This approach also offers benefits that are driving the interest in place-based education. Students derive experiential knowledge by participating in the different subsistence activities. They gain presentational knowledge because they tell about and share their experiences with others in formal and informal settings. There is also propositional knowledge that is gained as students seek further information about their experiences through literature, Internet or interviews with elders. And finally there is practical knowledge that is applied to their subsistence tasks.

**A culturally responsive curriculum fosters a complementary relationship across knowledge derived from diverse knowledge systems.*

What is needed

1. Subsistence Environment – provides the location and the resources – plants and animals.
2. Students – with high interest in outdoor, hands-on activities.
3. Instructors:
 - a. Community members able to instruct young people in subsistence skills.
 - b. Teachers able to collaborate with community members to set priorities and organize activities, and who can build upon students' experiences to develop reading, writing and mathematical skills.
4. The communities and students already have the basic materials for subsistence education. Supplemental materials can be acquired over time as the program grows.

How to begin: First, go out there. Then, plan.

Most of us are not trained in outdoor education. Get someone from the community who is adept in subsistence and have them take you and a group of students out to learn a skill that is new and challenging for you – but not overwhelming. And have the community person explain to the students what behavior is expected during this activity.

Should you survive this initial experience, you will have all kinds of ideas on what you will and won't do the next time, and you will generally be excited about the ways you discover to bring this experience that you share with your students back into the classroom to facilitate their growth in academic skills. And your response and insights will change every time you go out.

For Example

Berry Picking

Overview:

Berry picking is an important part of the Yupik culture. This tradition not only provides food for people during camp, but also has been an important part of maintaining their health during the long winter when Vitamin C is not available. The act of berry picking has also been a time for people to congregate, tell stories and deepen relationships with each other.

Activities:

1. Study the plants of the area in the classroom (identify 5 berries, including 1 poisonous berry)
2. Utilize the knowledge of local experts to go to areas where berries have traditionally been harvested
3. Use the berries for traditional foods (making akutaq and making jelly)
4. Write 2 papers about berry picking and using the berries

Content Standards:

LEVEL: (narrative describing activity associated) (Specific Level)

Writing: The class will write and edit two (2) extemporaneous compositions in a timed environment (W7.14)

One technical writing piece (scientific name, traditional use, etc...)

One essay piece about picking berries to process of using berries

Science: Will learn to use a dichotomous key to find species of plants that grow in the local area (S3.6)

P/S/S: The class will participate to pick the berries and make akutaq and jelly (P2.16, P2.19). Members of the class will practice skills to make and keep friends while picking berries and making traditional foods (P2.12)

Yupik: The students will need to pick three (3) types of berries and insure that they are not poisonous (Y5.2)

Health: The students will need to climb hills above 1000 ft. where the berries are found without hurting themselves (PE3.6)

Technology: Create a PowerPoint presentation about making jelly and akutaq. (T4.6 and T4.7). Record whole process on digital video to be used later to make a “Year in Review” iDVD

Assessment:

Writing projects will be assessed using the “6 traits of writing” rubric. Personal / Social / Skills will be assessed using a self-evaluation instrument, as well as by peer and teacher evaluations. An assessment for the Yupik portion will be based on elder, peer and teacher evaluations. The science and health content standards will be assessed using teacher created contents rubrics and rubric based presentations.

Traits / Standards	Emerging (-)	Developing ()	Proficient (+)	Advanced (*)
			Uses 5 of the 6 traits of writing correctly	Uses all 6 traits of writing correctly
			Identifies 5 types of edible berries and one poisonous berry (scientific and Yupik names) from the local area	Identifies more than 5 types of edible berries and one poisonous berry (scientific and Yupik names) from the local area

Beaver Snaring

Level 5 & 6

Subsistence Goals

This unit will focus on activities that will teach the students skills such as: how to dress to survive prolonged exposure to extreme temperatures, winter transportation safety, safety on ice, how to set and check beaver snares, and how to prepare beaver in a way that preserves both the fur and meat.

Content Standards

Reading: Before going out, the students will read articles about Beavers published by the Alaska Department of Fish and Game. They will also answer comprehension questions, as well as study new vocabulary words associated with the activity. (R4.11, R4.16, R5.6, R5.8, R6.8, R6.15)

Personal/Social/Service: The students will work cooperatively in small groups of 5 or 6 to set and check beaver snares, as well as skin and prepare the beavers they catch. When finished they will do peer and self-evaluations. (P2.2, P2.5, P2.6, P2.13, P2.16)

Writing: The students will make informal journal entries about their outdoor experiences. (W5.9)

The students will write a narrative report about their experiences. They will word process their stories, add digital pictures, and then add them to their own web pages. (W5.1-5.10, W5.12, W5.13)

Assessment

- Writing projects will be assessed using the “6 traits of writing” rubric.
- Personal social skills will be assessed using a self-evaluation instrument, as well as by peer and teacher evaluations.
- Subsistence skills will be assessed by an elder-generated subsistence-scoring rubric.
- The teacher will informally assess reading skills.

Winter Camp

Levels 3 & 4

Goal:

Students will experience an aspect of subsistence setting up a winter camp and staying overnight. The targeted skills include:

- Dressing appropriately
- Making and keeping the fire burning
- Cooperation
- Building a shelter

Activities:

Students will plan the camping trip with their teacher or an adult from the community. Students will gather and pack tents, tools, bedding, and clothing needed. Students will follow the plan of the leaders as they ski to the campsite. They will work cooperatively to set up shelters and gather the wood for the fire. Meals will be cooked on the campfire. In the morning they will pack their gear and clean the camp area before skiing home.

Content Standards:

Writing: In the classroom they will brainstorm and give input about the trip. They will write a narrative about the trip following the writing process. W4.2, W4.10, W4.11

Personal/Social/Service Skills: Students will write how they achieved the three personal/social/service skills or use a checklist. P2.2, P2.12, P2.13

Health: Students will ski a distance of 6 miles during the trip

Yupik: Students will dress appropriately for winter camping. Y2.6, Y2.7

Assessment:

The writing will be assessed using the 6 trait-writing rubric. Personal/social/service skills will be measured by self-assessment and group evaluation. Completion of the trip will be the standard for this first-time long distance trip. The teacher will provide a rubric for proper winter dress.