



Dennis Demmert and Jim Walton at the recent Native Education Summit held in Juneau. They are standing next to a statue Jim brought back with him from New Mexico. The statue, "Rainbow Warrior" by Cloud Eagle, symbolizes the unity of all creation.

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## Report On Native Education Summit

By Frank Hill, Angayuqaq Oscar Kawagley, Ray Barnhardt, Andy Hope and Merritt Helfferich

n March 1–3, 2000, over 50 leaders in Native education from across the state gathered in Juneau for a Native Education Summit sponsored by the Alaska Rural Systemic Initiative in cooperation with the Alaska Department of Education and Early Development and the Alaska Federation of Natives. A dedicated group of Elders, Native educators and others actively involved in Native education initiatives associated with the Alaska RSI spent three days reviewing current issues impacting schools in Alaska.

Given the many new state mandates, school reform initiatives and on-going challenges that school districts are grappling with as we enter a new millennium, it seemed an opportune time to step back and reflect on where we are and where we want to go with Native education. The focus of the summit was to take a look at how education programs and services can best be positioned to address the long-term needs of Native communities in this time of limited resources. We were particularly interested in examining ways in which the Alaska Department of Education, the University of Alaska and rural communities and school districts can work more

closely together in the provision of basic education services, as well as in staff development, curriculum enhancement, collaborative research and technical assistance. Reports and discussions focused on the following current statewide programs and initiatives:.

- Alaska Quality Schools Initiative/ Legislative Mandates—Rick Cross.
- Alaska Native Student Learning Action Plan—Bernice Tetpon.
- Alaska Federation of Natives Education Initiatives—Frank Hill.
- Alaska Standards for Culturally-Responsive Schools — Ray Barnhardt.

#### SHARING OUR PATHWAYS

## Alaska Rural Systemic Initiative

Ray Barnhardt, Co-Director University of Alaska Fairbanks ANKN/AKRSI PO Box 756480 Fairbanks, AK 99775-6480 (907) 474-1902 phone (907) 474-1957 fax e-mail: ffrjb@uaf.edu

Oscar Kawagley, Co-Director
University of Alaska Fairbanks
ANKN/AKRSI
PO Box 756480
Fairbanks, AK 99775-6480
(907) 474-5403 phone
(907) 474-1957 fax
e-mail: rfok@uaf.edu

Frank Hill, Co-Director
Alaska Federation of Natives

1577 C Street, Suite 300 Anchorage, AK 99501 (907) 274-3611 phone (907) 276-7989 fax e-mail: fnfwh@uaf.edu

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a publication of the Alaska Rural Systemic Initiative, funded by the National Science Foundation Division of Educational Systemic Reform in agreement with the Alaska Federation of Natives and the University of Alaska. We welcome your comments and suggestions and encourage you to submit them to:

The Alaska Native Knowledge Network University of Alaska Fairbanks University Park Building 1000 University Avenue P.O. Box 756730 Fairbanks, Alaska 99775-6730

(907) 474-5086 phone (907) 474-5615 fax http://www.ankn.uaf.edu e-mail: fyankn@uaf.edu

Newsletter Editor: Dixie Dayo

fndmd1@uaf.edu

Layout & Design: Paula Elmes

paula.elmes@uaf.edu

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- Alaska Onward to Excellence Case Studies—Ray Barnhardt and Oscar Kawagley.
- Rural Educator Preparation Partnership (REPP)—John Weise.
- Native Administrators for Rural Alaska—Frank Hill and NARA graduates.
- Consortium for Alaska Native Higher Education—Merritt Helfferich.
- APU/RANA Native Teacher Education Program—Christina Reagle.
- Citizens for the Educational Advancement of Alaska's Children—Willie Kasayulie

In addition to the above presentations, there were reports on many exciting regional curriculum development and language revitalization initiatives from around the state. Following status reports on the various initiatives, the participants turned their attention to developing draft "action plans" around three focal areas. Following is a summary of the recommendations put forward for follow-up actions in each of the focal areas.

#### Group 1: Develop an Alaska Native Education Action Plan for 2000

This group reviewed the issues that were raised in the summit (as well as the 1999 Leadership Retreat recommendations) and developed a preliminary outline of where we would like to be with Native education in Alaska by the year 2010 and the steps that will be taken to get us there. Recommendations of this group included:.

- Local cultural values shall be the preamble to all curriculum documents and instructional programs.
- Community members and culture bearers must greet and welcome new teaching staff and share local values and traditions.
- School districts must support Native educators to participate in the

- Bilingual and Multicultural Education Equity Conference (BMEEC) and the Native Educators' Conference (NEC).
- Native educators should join their regional Native educators' association.
- Native corporations should support actions/activities and development of their regional Native educators' associations.
- Encourage local school boards and administrators to anticipate worsecase scenarios with regards to the state exam. A local plan must be established.
- All secondary subject areas must focus on mastery of academic English.
- Develop alternatives (beyond remedial) to enhance academic learning.
- Develop peer tutors to work with students who do not pass the test.
- Develop local consortia to address FAS/FAE student services.
- Develop alternate assessment techniques that address the same skills but in culturally appropriate ways.
- Align all formal schooling from early childhood: preschool through high school.
- Connect advocacy groups of language immersion with Native educators' associations.
- Provide information to local parent advisory groups regarding ways to teach and fund indigenous languages and academic English.
- Set up a network for immersion schools for everyone.
- Incorporate local culture and heritage throughout the curriculum, interwoven with existing subjects.
- Incorporate Alaska Standards for Culturally-Responsive Schools into all district curriculum review processes. Hold districts accountable for this integration.
- Incorporate the social and spiritual meaning of arts as well as the practical applications.

- Support the corrected version of the teacher certification process being proposed to legislators.
- Recognize aides with certification, increased pay and professional development opportunities.
- Incorporate environmental studies as they relate to the use of technology.
- Utilize AKRSI's *Preparing Culturally-Responsive Teachers for Alaska's Schools* as a part of the state-mandated standards for educators (incorporate it into the evaluation process.)
- Take steps to increase the hire of certified Native teachers.
- Educate the community at large: What is meant by local control?.
- Provide local advisory school boards control over the hire of new teachers in their community.
- Revise local teacher hiring practices to include local interviews.
- Promote cadet teaching programs.

### Group 2: Develop an Action Plan for Native Teacher Preparation

This group was convened to address issues associated with the preparation of Native teachers for schools in Alaska and to develop a statewide action plan for a coordinated effort to double the number of Native educators by 2005. Recommendations of this group included:.

- Teacher preparation "internships" should be completed through a performance assessment process based on the cultural standards for teachers and the *Guidelines for Preparing Culturally-Responsive Teachers for Alaska's Schools* so that a candidate can demonstrate their proficiency at any time that they have acquired the necessary knowledge and skills to do so (including during, or even before, their undergraduate studies.)
- The director of the Rural Educator Preparation Partnership should convene representatives of the

- Native educator associations by audioconference on a monthly basis to provide guidance on all Native teacher education issues.
- Provide incentives for school districts to implement cultural orientation programs for new teachers as part of their annual inservice plan submitted to EED. The orientation program should include an extended camp experience and an "Adopt-a-Teacher" program.
- Make available a "cross-cultural specialist" endorsement for teachers built around the criteria outlined in the Alaska Standards for Culturally-Responsive Schools and the Guidelines for Preparing Culturally-Responsive Teachers.
- The UA system should develop a unified approach for the delivery of performance-based elementary and secondary teacher preparation programs and degrees to rural Alaska, with a particular focus on the professional development of the 700-plus teacher aides in rural schools.
- All teacher preparation programs should fully incorporate the Guidelines for Preparing Culturally-Responsive Teachers for Alaska's Schools and prepare teachers who are equipped to implement the Alaska Standards for Culturally-Responsive Schools.
- The Guidelines for Preparing Culturally-Responsive Teachers for Alaska's Schools and the cultural standards for educators should serve as the basis for the review and approval of courses to be used to meet the state multicultural education and Alaska studies requirements.
- The state school designator criteria should include an assessment of the extent to which the ethnic composition of a schools' professional staff is proportional to the ethnic composition of the students being served and if they are dis-

- proportional, the school improvement plan should indicate how such a balance will be achieved.
- The Alaska Native Knowledge Network will prepare an online database listing all qualified Native teacher and administrator candidates as identified by the respective Native educator association.
- School district career ladder programs should be established to provide incentives and support for aides and associate teachers who are aspiring to be licensed teachers. The AFN Goals 2000 funding should be used to provide additional incentives to the districts.
- Provide an option for school districts to employ teacher interns to serve as classroom teachers during their internship year under the supervision of a mentor teacher.
- All Native organizations, including tribal councils and Native educator associations, should provide assistance and a supportive environment for qualified Native educators seeking employment.
- School boards and districts should take a proactive posture toward local hire of teachers, including financial incentives and providing an induction program for those new to teaching.
- The University of Alaska should reinstate experienced rural faculty at all of the rural campuses to provide student support, instruction and supervision for REPP and all other rural teacher education candidates.
- Native corporations should take a proactive role in recruitment and financial support for Native teacher education students.
- Insure strong Native representation on all professional faculty associated with teacher and administrator preparation programs in Alaska.
- Assist schools designated as low-

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- performing in the development of school improvement plans consistent with the *Alaska Standards for Culturally-Responsive Schools*.
- Establish a regular extended PRAXIS Institute to help prepare students for the PRAXIS I exam.
- Foster close collaboration between all public and private institutions involved in preparing teachers and administrators for Alaska schools.
- Secure financial support and recognition for the regional Native Educator Associations.
- Enlist the support of school counselors, NEA-Alaska and Native educator associations to implement "Future Teacher Clubs" in all schools in Alaska.

#### Group 3: Develop an Action Plan for Strengthening the Role of Tribal Colleges/CANHE

This group reviewed the current status of the regional tribal college initiatives and outlined ways to strengthen the role of the Consortium for Alaska Native Higher Education (CANHE) in bringing Alaska Native educational expertise to bear on the issues identified at the summit. Recommendations of this group included:

 Make a presentation on tribal colleges to the University of Alaska Board of Regents advocating the

- benefits of the Ilisagvik/University of Alaska Fairbanks memorandum of agreement. Utilize the material in the Native educator's presentation showing the lack of duplication of effort between UA and tribal colleges and demonstrating benefits by use of data showing the success of Natives in tribal colleges.
- Call on the University of Alaska, Alaska Pacific University and Sheldon Jackson College to adopt a policy supporting the development of tribal colleges in Alaska and offering provisions of assistance to the new colleges.
- Call on the Alaska Intertribal Council (AITC), Alaska Federation of
  Natives, Alaska Native Health
  Board, the tribes, Alaska Native
  Brotherhood/Alaska Native Sisterhood (ANB/ANS) and other Native
  organizations to support the development of tribal colleges and
  urge them to express that support
  to the Alaska congressional delegation.
- Seek passage of amendments to the Tribally-Controlled Community College and University Assistance Act which designate Alaska as a special case.
- Tribal college trustees and staff should meet with tribal councils and call on clan leaders to partici-

- pate in such presentations to enlist the councils in college planning.
- CANHE should, with the help of the Alaska Native Knowledge Network, publish a brochure on tribal colleges outlining CANHE goals and tasks.
- CANHE should consider a tribally-established college accreditation process.
- Call on Native educators associations, REPP and CANHE member institutions to develop a collaborative teacher training program that incorporates the cultural standards and Guidelines for Preparing Culturally-Responsive Teachers for Alaska's Schools and the Guidelines for Respecting Cultural Knowledge.
- Develop transition programs to minimize the barriers between high school and college.
- Develop a logo for CANHE (perhaps featuring an iceberg or sealskin.)
- Create and implement an inter-regional Elders exchange program.
- Identify and tap the human resources and funding to facilitate tribal college development.
- Develop and maintain a body of data on Alaska Native higher education enrollment, dropout and graduation.
- Organize regional Native education meetings to implement the Alaska Native Education Summit recommendations.

The above recommendations can serve as the basis for developing more detailed action plans in each of the three focal areas listed. We wish to express appreciation to all the participants in the Native Education Summit for contributing their valuable time and insights to this effort. We invite everyone with an interest in these issues to offer ideas and suggestions for how the action plans can be further strengthened so that we can move into the millennium with a bright future for education in rural Alaska.

### Alaska RSI Regional Contacts

#### **Elmer Jackson**

Iñupiaq Regional Coordinator (907) 475-2257 e-mail: fnej@uaf.edu

#### Barbara Liu

Yup'ik Regional Coordinator (907) 543-3467 e-mail: fnbl@uaf.edu

#### **Amy Van Hatten**

Athabascan Regional Coordinator (907) 474-0275 e-mail: fyav@uaf.edu

#### **Andy Hope**

Southeast Regional Coordinator (907) 790-4406 e-mail: fnah@uaf.edu

#### Teri Schneider

Aleutians Regional Coordinator (907) 486-9276

e-mail: tschneider@kodiak.k12.ak.us

## What Is This Thing Called "Love"?

any books and articles have been written on the subject of love, however, I would like to attempt to explain it from the viewpoint of one Yupiaq, myself. Ellam Yua (Spirit of the Universe, God) is the giver of love, the light of intelligence and

# "Observing Locally, Connecting Globally" Summer Institute for Educators July 31-Aug 11, 2000

bserving Locally, Connecting Globally is a longterm NSF-funded science education project based at the University of Alaska Fairbanks. We invite you to participate in our first institute to be held at UAF July 31 to August 11. Participants will receive training in GLOBE (Global Learning and Observations to Benefit the Environment), current best practices in science education and the integration of local and traditional knowledge into environmental studies.

The goal of this program is to support and enhance global change research generated by grades 5–12 doing local investigations in classrooms across Alaska. It will be supported by the integration of Native and locally-relevant knowledge and community and university scientists. Anyone working with grades 5–12 is welcome. We are encouraging teams of educators from rural Alaska and those working with a large number of Native students.

Cost: \$75 (subsidized by the National Science Foundation)

Travel assistance and per diem available on an application basis

Credit: 3 credits, NRM 595 or ED 595

Instructors: Dr. Elena Sparrow, Dr. Leslie Gordon, Sidney Stephens.

Fill out the application and return by May 1, 2000 (It can be found at http://www.ankn.uaf.edu/olcg.) Please return application to:

Elena Sparrow University of Alaska Fairbanks

303 O'Neill Building PO Box 757200

Fairbanks, AK 99775-7200

(907) 474-7699 FAX (907) 474-6461

email: ffebs@uaf.edu 🗼

by Angayuqaq Oscar Kawagley understanding. Love allows one to do almost anything for something held dear in the heart. It is a powerful emotion which is unconditional. Based on this, I can say that love is a sense of belonging and being in touch with something that is good and beautiful, thus deserving care and harmony.

It then behooves Alaska Native people to instill this sense of love in education, in cultural camps and in everyday life. We want our students to be connected to order, to the patterns and symmetries of this universe. We want them to be able to see the good and the beautiful in their own place. This bonding with place will allow the Native people to do things that will not harm that place, to do things to rebuild, reclaim, regenerate and rehabilitate that place where necessary. They, in essence, will be thinking in terms of the happiness and satisfaction of the Seventh Generation. When some of these Native people become scientists and technologists, they will do things that make them happy as they are immersed in the beauty of the place in which they live. This love of place is sometimes lacking in modern scientists and technologists who are often trained to operate without a heart, such as the Tinman in the The Wizard of Oz. Too often scientists and technologists are expected to use only the brain without giving due consideration to the heart. We, as Alaska Native people, must learn to love oneself, love one another (kenkuraulluta), and above all relearn to love place. 🔪

## **Southeast Region:** I am Salmon Action Plans

by Xaastanch Andy Hope

The *Iam Salmon* staff development workshop held in Juneau, March 17–18 was a success. The teams produced action plans for the time period, March 17–August 31. These action plans will be refined and adjusted over the next several months.

Participants were Angie Lunda and Dianna Saizwith Floyd Dryden Middle School; Phil Miscovich, Sally Kookesh and Colby Root with Angoon School; Lianna Young, Nancy Douglas, Peggy Cowan and Henry Hopkins with the Juneau School District; Arnold Booth and Marie Olson from the Southeast Alaska Native Rural Education Consortium (SEANREC) Elders Council; Nora Dauenhauer and Richard Dauenhauer with Tlingit Readers; Michael Travis, an independent contractor and Andy Hope, Southeast regional coordinator, AKRSI.

#### **Angoon Action Plan**

#### The Angoon team will:

- Arrange a three-day technology staff development workshop in Angoon, with Henry Hopkins of the Juneau School District as facilitator. Chatham School District will fund Henry's travel from AKRSI MOA funds. This workshop should take place before early May. The workshop should include presentations on the Native plant multimedia project and website development training. The Angoon team will invite Lydia George (SEANREC Elders Council), Jimmy George, Mary Jean Duncan and Shgen George to participate, as well as any other interested teachers and the Chatham District technology coordinator.
- Participate in a staff development

- academy on the cultural standards. This academy is tentatively scheduled for August 21–22 in Juneau and will be sponsored by the Juneau School District. Credit for this academy should be jointly provided by the Southeast Alaska Tribal College and Alaska Pacific University.
- Participate in the Rural Education Academy in Fairbanks, June 2–3, 2000. Andy Hope and Henry Hopkins will coordinate a presentation on the I am Salmon project.
- Participate in I am Salmon presentations in Seattle in July in conjunction with the World Music and Dance Festival.
- Coordinate with the Angoon Culture Camp in planning summer educational opportunities.
- Coordinate with the Juneau School District to ensure that teachers from Angoon participate in the Tlingit Language Adult Immersion Camp scheduled for Klukwan in July.
- The Angoon School has a Japanese intern this spring. The Angoon team will request the intern's assistance in establishing communications with the I am Salmon teams in Japan.

#### **Juneau Action Plan**

#### Angie Lunda will:

- Coordinate production of 3-D topographic maps of the Juneau area.
- Utilize resources such as the Haa

*Áanee* book to document Native place names and traditional land uses in the Juneau area.

- Organize field trips to streams in the vicinity of Floyd Dryden School in the Mendenhall Valley as part of her stream ecology unit this spring. Students will participate in water quality testing, fish camp lessons and write comparison/contrast essays.
- Work with the Juneau School District Tlingit Language Seminar group to integrate Tlingit words and phrases into the stream ecology unit.

#### Dianna Saiz will:

- Develop a language arts production, a shadow theater performance that will utilize Tlingit language.
   She will consult with playwright-producer David Hunsaker on shadow theatre production techniques.
- Utilize the partnership salmon story to produce a salmon poetry anthology.

Nancy Douglas and Lianna Young will assist Angie in integrating fish camp curriculum into Angie's classroom. Angie Lunda/Dianna Saiz/Lianna Young will develop a quilt project in which students produce and exchange salmon quilt squares.

## Group Recommendations

Michael Travis and Henry Hopkins will develop an *I am Salmon* Southeast Alaska website. How about using the term Raven Creator Bioregion instead of Southeast Alaska? Or will

that be perceived as an act of secession? The website will be housed in the UAS server at the Auke Lake Campus in Juneau.

Nora Dauenhauer will draft a proposal to transcribe and translate Tlingit language tape recordings of the late Forrest DeWitt, Sr., a member of the Aak'w Kwáan, (traditional tribe of the Juneau area) L'éeneidi (Raven moiety) clan.

Micheal Travis will develop an electronic version of the *Tlingit Math Book*.

Andy Hope will arrange for a short-term contract with Jimmy George, Jr. for technical support for the *I am Salmon* teams for developing Tlingit language software.

It is recommended that each team purchase a high quality digital camera for use in producing multimedia presentations. It is recommended that Elders be compensated \$150 per day, with a minimum honorarium of \$75 for partial days.

#### Some Good Books

- Igniting the Sparkle: An Indigenous Science Education Model by Gregory A. Cajete
- Earth Education: A New Beginning by Steve Van Matre
- Village Science and Village Science Teacher's Edition by Alan Dick
- Understanding By Design and the Understanding by Design Handbook by Grant Wiggins and Jay McTighe

Those interested in obtaining copies of the *Village Science* books should contact Dixie Dayo at fndmd1@uaf.edu

The *One Reel Wild Salmon* website is now online in draft form. The URL is www.onereel.org/salmon. I have been in contact with representatives of Carcross School in Carcross, Yukon and Yupiit School District. I anticipate that teachers from those districts will be forming *I am Salmon* teams in the near future.

## Aleut/Alutiiq Region Kodiak Alutiiq Cultural Values

Understanding our environment and events that have shaped our lives and created the culture of our ancestors is vital for our children's cultural survival. The history of our People and our place in the world is a part of who we are today. Kodiak Alutiit must learn and pass on to younger generations our understanding of our natural world: the sky, land, water and the animals. As we meet the challenge of living in the 21st century, we must continue to live in honor of those things we value:

Our Elders



Our heritage language

Family and the kinship of our ancestors and living relatives

Ties to our homeland

A subsistence lifestyle, respectful of and sustained by the natural world

Traditional arts, skills and ingenuity

Faith and a spiritual life, from ancestral beliefs to the diverse faiths of today



Sharing: we welcome everyone

Sense of humor

Learning by doing, observing and listening



Stewardship of the animals, land, sky and waters

Trust

Our people: we are responsible for each other and ourselves

Respect for self, others and our environment is inherent in all of these values.

NATIVE EDUCATORS OF THE ALUTIIQ REGION • ALUTIIQ ELDER'S COUNCIL

THE ALUTIIQ ACADEMY OF ELDERS

# **Iñupiaq Region:**Traditional Methods of Healing & Medicines for Science Fair Projects

by Elmer Misrak Jackson

The Iñupiaq people living in the Arctic have knowledge of healing utilizing natural products from the land and waters. Plants and other natural products are used in prepared remedies that have healing effects on the human body. Students can research the remedies used in traditional medicine and healing for science fair projects. Elders, tribal doctors and community health practitioners have knowledge of plants and animal remedies that are used for healthy living. The following is some background information on ways Iñupiat have utilized plants and parts of animals for medicines and healing.

In the springtime, willow leaves (sura) are harvested and preserved in seal oil for food. Sura's high Vitamin C content hastens the healing process. Sura, mixed with seal or whale oil and a small amount of sugar, complements many Native foods. Crushed sura leaves are applied to wasp or hornet stings. This stops the swelling and removes the poison.

Bear fat and other animal tallow help heal sores, boils and other infections. Eating a well-balanced diet of Native foods aids healing. These foods are meat, fish, berries, sour dock, wild rhubarb, *sura* seal and fish oil.

The intestinal tract is saved from porcupine (iluqutaq). This long intestinal tract is stretched and hung to completely dry. Once dried it is ready to be used as a medicine. It is a cure for stomach ailments and diarrhea. The dried, digested food is crushed and water is added, then taken internally. This herbivore feeds on grasses, willow leaves in summer and tree bark during the winter. The iluqutaq is a subsistence food of the Iñupiat.

Qaluum uqsrau is fish oil. Fishing for whitefish on calm days seems to make work easier. The fish are scaled, washed, cut and hung on poles to dry. The edible stomach organ and eggs are washed and boiled. The fish oil rises to the surface. The cooked contents are removed, leaving the oil on the surface. The oil is saved, cooled and then used to dip the fish, eggs and stomach before eating.

Qaluum uqsrau can be used as medicine. When young children have a common cold with coughing, sore throat or the flu, they are given fish oil. The soothing oil moisturizes dry sore throats and hastens the healing process. The oils, rich in iron and protein, are essential for healthy living.

You can also massage heated fish oil onto a child's chest when they have a chest cold and congestion.

The cottonwood tree (ninyuq) produces buds that can be used as cough syrup in early summer. These sticky buds are used for making cough syrup not only for sore throats, but also for

colds and congestion.

Like fish oil, cranberries have healing properties for the human body. Cranberries are rich in Vitamin C and can be used as medicine for sore throats, the common cold, congestion, chest colds and sores. They help the body's organs get rid of the body wastes. Cranberries cooked the traditional way are delicious.

Another home remedy for sore throats is to mix pure honey, lemon juice and stinkweed leaves (sargiq). Bring the mixture to a boil, reduce heat and simmer 10 to 20 minutes. Cool and store for preservation. Taking this internally will help heal sore throat and common cold ailments.

The stinkweed plant (sargiq) is a common medicinal plant that grows in the Arctic. The 24-hour sunlight nourishes sargiq, along with other plants in the ecosystem. In midsummer, when the buds begin to appear, is the time to harvest sargiq. Harvest the entire plant: the stems, leaves and bulbs. This is when the plant is most potent. Bundles of sargiq are gathered and preserved. Fresh sargiq is prepared into medicinal salves or taken internally. Prepare salve for applying on the chest for chest colds, head cold and congestion.

Another salve is made by frying cut onions or wild chives (paatitaat) and garlic using shortening or lard. Fry until the onion becomes transparent. Cool and preserve. Apply to the chest for congestion from chest and head colds. Add salve to hot water for steaming. Place the steaming hot salve on the floor. While holding a child on your padded legs, cover with a bed sheet and let the child breathe the medicinal steam. It will help the lungs and nasal passages get rid of the mucus and congestion. Cut and mince sargiq stems, leaves and bulbs. Pan fry with lard, shortening or bear fat. Reduce heat and cook until stems and leaves release their medicinal contents. The stems and leaves will resemble



The stinkweed plant (sargiq), pictured above, is a common medicinal plant that grows in the Arctic. The 24-hour sunlight nourishes sargiq, along with other plants in the ecosystem. (Photo by Dixie Masak Dayo who is studying traditional healing and herbology.)

cooked spinach. Cool entire contents and preserve. When needed for colds or congestion apply on the chest and neck. For steaming, apply salve to boiling hot water and cover with a bed sheet—breathe the soothing moisturizing cure.

Sargiq can be taken internally for most body ailments. Sargiq can also be made into a hot drink prepared like tea. A warm or hot bath with sargiq is healing to the skin and body. It helps heal sores and is used for a treatment for arthritis. Students should research other medicinal uses of sargiq and discover new medicines and remedies for healthful living.

Crowberry (tullukam asrait) has medicine in the berry that benefits the urinary tract, intestines, liver and stomach. The berry is especially effective on urinary tract problems.

Natural clay can soothe arthritis and bone ache. The heated clay relieves aches and helps the healing process. This natural resource also has other uses. For example, this material is put between the logs of the log cabin. The clay hardens, making the log cabin draft proof. Clay can be found at or just below the shoreline where there are large boulders of rocks and sand

Medicinal greens grow all year long near natural hot springs. Natural hot springs have been visited by the Iñupiat and the Athabascan people for generations. They knew about the medicinal greens and the soothing spring waters. Before submerging into the hot springs, one must drink spring water and consume medicinal plants. These two steps help people get their bodies ready for the hot spring water. The medicinal greens that grow near the springs are medicine for ulcers, stomach problems and sores. Water and greens are taken from the springs for home use.

Every so often a tree swallow (tulugaġnauraq) is taken for medicinal purposes. The feathered bird is split in half and dried completely. When it dries, it is preserved for future use. Tulugaġnauraq is one of the most effective medicine for sores, cold sores

and mouth sores. Part of the dried bird is soaked in pure water and applied to the sores. This application is repeated until the sores heal. The sores heal quickly with this method. Proper diet helps the body's immune system heal sores or body infections. Proper diet includes berries, *sura*, sour dock, wild rhubarb, fish oil and meat that are rich in Vitamin C, iron and protein.

Teachers and students should plan to visit Elders and interview them about traditional healing and medicines. Before the interview it is important that the Elders understand what they are going to be asked to talk about. Get permission to record and to document the interview. They have much knowledge about the Iñupiat *illitqusrait* (way of life). Students can incorporate this information in their science fair projects through video, charts and samples of plants and animal products used in traditional medicine and healing.

Tribal doctors are gifted people who have knowledge of human anatomy. They know about plants and other natural products that promote healing. Students can send samples of medicine plants to be analyzed. There are cures yet to be discovered. Find where medicinal plants and natural products can be analyzed through scientific research for possible new medicines. Make sure you follow the *Guidelines for Respecting Cultural Knowledge* when you do so (the guidelines are available on the ANKN website.)

Finally, when you visit an Elder, bring them a fruit basket or gift to show your appreciation for sharing their indigenous knowledge.

#### References

Aana (Grandma) Clara Jackson. These traditional remedies are common knowledge and shared with each generation of Iñupiat since time immemorial.

## Yup'ik Region: Calista Region Culture Camps

by Mark Miisaq John

alista Elders Council (CEC) has received funding to run three ten-day culture camps in the Calista/AVCP region this summer of 2000. The first one will be at Umkumiute on Nelson Island June 4–14 for the coastal villages, the second from July 23 to August 2 near Kwethluk for the Kuskokwim villages and the third will be between Pilot Station and Marshall for the Yukon villages August 6–16.

The camps will incorporate two groups: village Elders, teachers and teacher aides who will serve as the camps' teachers and mentors to the second group of participants, seventhand eighth-grade youth who will be attending the camps to learn Yup'ik/Cup'ik cultural skills, history and values. Subsistence hunting, fishing and harvesting activities appropriate to each camp location will be the focus of the camps, providing the Elders an opportunity to pass down traditional skills and values.

In keeping with the language and spirit of CEC's mission, two primary groups will share our culture camp experience. The first group is comprised of village Elders (one per five campers, an equal number of men and women) who will serve as the teachers and counselors of our traditional values and life skills. The second group is village youth (two per village, an equal number of boys and girls) who will be their students and partners in this culture-based learning experience.

Tribal governments from the three Calista regions (Coastal, Kuskokwim and Yukon) where the camps are to be conducted will recommend the camp Elders. In this way, the Elders of each camp will possess knowledge that is sensitive and relevant to each region's

geography and the unique traditions and necessary life skills that evolved from it.

The process by which youth participants will be selected follows: first, seventh- and eighth-grade students will be targeted primarily because of their youthful enthusiasm, openness and conceptual maturity. Equally important is that this age group, after returning home from camp, can serve as ambassadors for their experience, excited and committed to sharing what they have learned with others as their roles and responsibilities grow within the village communities.

The timing and location of CEC's three camps will be based on each region's subsistence season and knowledge of the area's fruitful hunting, fishing and harvesting sites.

The activities of the camps will take on a daily rhythm similar to a traditional subsistence camp setting. To facilitate the Elders' active participation and the young campers' individualized learning experience, one Elder will be assigned to every five campers. The Elders' responsibilities will be to act as their groups' supervisors, teachers and mentors.

Each morning two of these groups will rise before the others and assist the camp cook in setting up, preparing, serving and cleaning up after the morning meal. They will continue to perform these responsibilities for the rest of the meals that day, their Elders reminding and modeling for them the importance their domestic chores play in fortifying the larger group for the day's subsistence work.

Following breakfast, the camp director, teachers, teacher aides and Elders will introduce the day's subsistence activities, the values associated with those tasks and what effect the groups' labors will have on those who will receive the benefits (i.e, their families, Elders, those who have lost their providers, etc.)

Each day the groups and their Elders will be assigned to different subsistence tasks with the understanding that every group will be able to participate in and learn each of the subsistence skills. During these activities, the Elders will supply the youth with the cultural knowledge necessary to perform each skill or task and teach the traditional values which infuse those tasks with meaning and spirit.

After lunch each day the students will spend two hours on science activities. The teachers and teacher aides will work with the students in developing science projects using subsistence activities that are taking place in the camps. The teachers should help prepare the students for science projects they can develop in the camps.

At the end of the day, after the evening chores and meal have been completed, the camp director will review the day's activities as a transition into a discussion of how subsistence tasks and values relate to those found in the western world. The goal will be to instruct our young people about how they can draw upon and apply their own traditional values to those of another culture so that they may survive in it—economically, spiritually and culturally.

The evening will conclude with recreational activities (hiking, lap games, Native Olympics) and an opportunity for each of the camp groups to meet with their Elders, ask questions, share experiences and hear stories celebrating their ancestors' rich history and mythology.

These three exciting camps will invite two students from each listed village. The pool of applicants will be incoming seventh- and eighth-grade girls and boys. The application deadline is April 21, 2000 and the names are to be submitted to Mark John at Calista Elders Council by May 4.

The Bering Sea Coastal Camp at Umkumiute will host 28 students from LKSD sites, 4 from LYSD, and 2 from Kashunmiut. The Camp dates are June 4–14, 2000. Coastal camp villages are Scammon Bay, Hooper Bay, Chevak, Newtok, Tununak, Toksook Bay, Nightmute, Chefornak, Mekoryak, Kipnuk, Kwigillingok, Kongiganak, Tuntutuliak, Eek, Quinhagak, Goodnews Bay and Platinum.

The Yukon River camp in Cuilnguq will host 16 LYSD students and two from St. Mary's School District. The camp dates are August 6–16, 2000. Yukon camp villages are Russian Mission, Marshall, Pilot Station, Saint Mary's, Pitkas Point, Kotlik, Emmonak, Alakanuk and Sheldons Point.

The Kuskokwim River camp will have a base at a camp site inside Kuiggluk and a second camp set-up at Kialiq. This camp will host 16 LKSD students, 18 students from Kuspuk and 6 students from Yupiit. The camp dates are July 23–August 2, 2000. Kuskokwim Camp villages are Lime Village, Stony River, Sleetmute, Red Devil, Crooked Creek, Chuathbaluk, Aniak, Upper Kalskag, Lower Kalskag, Tuluksak, Akiak, Akiachak, Kwethluk, Bethel, Oscarville, Napaskiak, Napakiak, Atmautluak, Nunapitchuk and Kasigluk.

As school districts that serve these village sites plan with Calista on this wonderful summer opportunity, we are anticipating strong support staff to assist the Elders. Culture camp applications are online at http://

www.ankn.uaf.edu/culturecampapplications.html and need to be turned into Calista Elders' office by May 4. Students and parents will be notified before school closure.

## Developing Culturally-Responsive Curriculum

by Esther Arnaq Ilutsik

Keynote address presented at the Bilingual/Multicultural Education Conference February 4, 2000

reetings to the first Bilingual/Multicultural Education/ Equity Conference of the 21st century. I am honored and humbled to be standing before you—honored that I have been asked to speak and bring forth issues that need to be addressed by all of us as we enter the 21st century, and humbled by the great expertise that is assembled in this room. I will begin with an oral story, as is the tradition of the Y up'ik people, told and shared by my late mother Lena P. Ilutsik. She begins:

And then there was this blackfish swimming up the river, maybe he was heading down the river. As he was going along he came to this fish trap. Well, he got inside and he probably had others with him. While they were trapped inside of the fish trap, they heard a person coming up on top. Well, when he got to them he pulled them up. Well, he poured those blackfish into his pack. Then that person said, "Oh my, one of these blackfish is so big! What a big blackfish." Well, he brought them home. He packed them and brought them home. When he got home he told his wife to cook the blackflsh. He wanted to eat that big blackfish. Well, she cooked and she cooked them. When they were cooked that man apparently ate that blackfish, the one he was praising. Well, he (the blackfish) got inside of that man, he was still conscious even if he was cooked. Well, he was inside the man, and when he got tired of being in there he went out of the man. Well, that man passed him. It was during the time when outhouses

had not been introduced to the people yet. And people just used to go on the ground. Well, that man passed him and the blackfish who was still conscious just stayed in the man's feces. Then as he was staying there this dog started coming toward him. Well, that dog ate him. Well, he stayed inside of that dog. Then by and by when he wanted to go out that blackfish went out. Well, when he went out he stayed there in the dog's feces. As he was laying there he saw a person walking toward him. Well, when that person got to him and when he stepped on him he lost consciousness, Well, this is as far as the story I heard

(translated by Virginia Andrew, 4/16/97)

Why do I begin with a story? As a Yup'ik, as an educator, as a parent and as a lifelong learner, I find myself a part of a cultural group and a world in transition. Some of us have found ways to retain some of our oral stories and we do this by providing a theme

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story for the curriculum units that are developed and integrated into the school system. We, as educators, need to demonstrate by example. If we believe in something we need to demonstrate that we can also utilize the model and method of approach in our own teaching method. Addressing a group of people and sharing our knowledge and ideas is a method of teaching. Too often we hear potentially unique and aspiring methods but they are not utilized by the messenger.

We need to share the approach that we are using within the classrooms. This is the theme of my presentation to you. I will be referring to it during the remainder of my talk. In the meantime, think about why would a mother share the blackfish story with her children? Remember, within the Yup'k culture, as with many other indigenous cultures, stories were told without being analyzed. They were told so that the listener would have his or her own interpretations, so that at some point in his or her life the story would surface and meaning would become clear—that is why the story was shared with me.

One of the blessings of parenthood is that it makes us reflect back on our own educational experiences, both at home and in the school setting. We, as parents, are concerned about the education that our children will receive. We want the best for our children. We want to make sure that they have a good foundation—a good understanding of who they are and where they fit into this world that is being presented to them. Far too many of us remember ourselves as the "invisible" people with an aspiration to adopt the dominant culture's model.

Remember the reading series, Dick and Jane and their dog Spot? What did it show us? It provided an ideal American, caucasian family living in suburban America—a mind set laid down subtly showing us that our little humble dwellings did not fit the ideal



Alex Lopez practices his storyknife skills. Photo by Esther Arnaq Ilutsik.

that American education was after. It brings to mind the man who desired the largest blackfish in the fish trap. The desire was so great that all the other blackfish were invisible. We too have looked at the ideals that were portraved in the schools, in the textbooks, and other materials as the big blackfish and all other aspects of our life became invisible—our traditional foods, our stories, our dances, etc. Our desire was to consume and become like the big blackfish. Fortunately at some point in our life, we expelled the big blackfish. We became disillusioned, confused and disoriented with what we had desired. Like the man in the story, we expelled this blackfish from our body and mind, but unfortunately the blackfish still did not lose consciousness. We still find ourselves being drawn everyday to adopt another life form.

Parenthood makes us bold and inquiring of what is being taught and emphasized in the school setting. We begin some innocent investigating. On the surface, the curriculum looks promising, but investigating further we find that certain textbooks, including the ones for the "core" cur-

riculum adopted by the district and used by the teachers, haven't really changed that much since the Dick and Jane series. Now, instead of a dog named Spot, we have a dog named Bingo. Although animals from our environment may be portrayed, they are often presented with misleading information. One can wonder how our Elders would have presented this information. What would be their focus and would the information be presented in a culturally-local relevant way? Actually, I was shocked to find that none of the stories contained in one of the current reading series portrayed any of the North American indigenous peoples. There were tales from Japan, China and even Africa, but nothing from the indigenous peoples of North America. Again, we have become the invisible people.

Our children can be portrayed as the dog desiring the feces of the man (the fantasy culture), with their own cultural identity again being invisible. Sure, the bilingual education and other federal programs that are offered are supposed to address this need for identity and equity, but they do so at a cost. Our children often go to these classes with reluctance, and the teachers that are hired for these positions are often paraprofessionals who are allowed only 30 minutes or less for instruction. Many of these teachers have very little training, if any, and most have to create their own materials that are often looked upon as second-rate in comparison to the flashy, colorful textbooks and materials that are being used by the primarily non-Native certified teachers. We, as the parents, want these types of attitudes expelled, much like the blackfish expelled by the dog, so that we can stamp out the undesirable and give our children the opportunity to start afresh with a new consciousness and a positive attitude about themselves.

Some of us parents have taken it upon ourselves to make those changes.

After attempting to go through the administration to make changes, we realized that this would require many, many years of re-education and redirection, while our children are in school now and need that foundation to set the stage for their future education. How do I as a parent make sure that my child receives the strong foundation that I so desire? As an educator, I always welcomed parent involvement, so that would be the key to getting into the classroom and influencing the teacher. I was in a fortunate stage in my life when I was between jobs and had time to enter the classroom. I was also fortunate to have been able to select the teacher that I wanted for my child. This teacher, Ina Bouker, happened to be a colleague, a member of the Ciulistet Research Group, a friend and most importantly, a relative who shared my vision of taking the Yup'ik knowledge of our Elders and bringing it into the regular classroom. We wanted to achieve integration in the true sense, not integration with 30 minutes of Yup'ik instruction three times a week, but on a daily basis through the regular certified teacher. In this way, it could truly elevate the status of the local culture.

One of the first units we tackled was the "Heartbeat Unit." This stemmed from a Ciulistet Research Group meeting that was hosted up in Aleknagik where the discussion focused on Yup'ik dancing. How do we take this information and bring it into the regular classroom? In a Bouker had this brilliant idea of integrating this information into the health strand of the school district curriculum. The heart would be the focal point. The heartbeat would connect well with the beat of the Yup'ik drum—the beat of life. The three main Yup'ik colors (red, black & white) naturally became a part of the study with basic patterns introduced and emphasized while the Yup'ik dancing and the stories they tell provided the natural flow. Legends of the Yup'ik people were shared and told through the Sonor games (a board game adapted from the Yakutsk-Sakha, the indigenous people of the Russian Far East). What a wonderful and truly memorable experience for my daughter and her classmates. In fact she still talks about the experience she received in second grade (she is now in the seventh grade) and it was not too long ago when I was at the local grocery store during "the rush" when I heard a voice, "Esther, where have you been?" I followed my eyes to the voice and saw one of my daughters former classmates. He continued, "Why are you not coming to our classes anymore? I really miss you."

I was fortunate to get a job with the Alaska Rural Systemic Initiative through the University of Alaska Fairbanks/Bristol Bay Campus where I have been able to continue with the curriculum process we started with the heartbeat unit. I followed my child and made sure that at least one of the units taught in her classroom focused on the local culture. In the third grade we focused on the Yup'ik fancy squirrel parka with an emphasis on patterns and the history of the Yup'ik people. At the fourth-grade level we completed the patterns on the parka integrating it into the math strand and at the fifth-grade level we looked into Yup'ik basketry.

But the most important thing is that I continued to work with Ina Bouker and her students. Here we integrated many different units of study into her classroom. All the knowledge that we shared within the classroom was information that our Elders shared with us in our Ciulislet Research meetings. It was like we were finally learning things about our culture that we had missed when we went to school and now were learning them and were able to share this information with the next generation. It reminded me of what Moses went through in the Bible. Most of you know the story about Moses, how he



Michael Filipek listens to his heart as part of the Heartbeat unit. Photo by Esther Arnaq Ilutsik.

was found floating in a basket on the Nile River by the pharaoh's daughter and was educated in the finest institutions in the then-known world. Eventually, when he was called to take his people into the wilderness, he spent another 40 years literally uneducating himself from his previous training. So it is with many indigenous peoples around the world and in North America. We have been sent to schools and literally educated out of our culture. The results have been truly devastating to many of our people, but some have miraculously succeeded and are now realizing that the knowledge of our Elders and our people is important and that this knowledge base must be taught to the future generations.

The documentation of this knowledge base must be authored by our own people. We cannot continue to rely on outside experts—professional people with prestigious degrees—to come in and study our culture and write about how we should integrate this information into the school system (even if it is reviewed and acknowledged by indigenous educators.) We need to do it ourselves—we need to demonstrate to the world that we have come to a

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point where the information provided is authentic and is based on interpretations by local indigenous people. We cannot continue to accept information written by a person "looking in." We cannot continue to read information that was obviously written by a person from another cultural perspective. We cannot continue to serve in the role of providing corrections and apologies.

We are entering an era where we, as indigenous educators, have to author our own materials with confidence in our own abilities. We can strengthen our role by getting the Alaska Standards for Culturally-Responsive Schools to be addressed by the local schools as well as through the Alaska Department of Education and Early Development. With commitment and determination, we are able to gather the knowledge of our Elders and bring it into the classrooms. We are able to author our own materials, test them in the classrooms and develop them into resources that will be available for other educators.

In conclusion, we, like the man who stepped on the dog's feces and destroyed the consciousness of the blackfish, have arrived at a point where we are slowly beginning to "crush" out all the misinformation that has plagued and stereotyped us in the past. We are, by demonstration, showing the world that our cultural knowledge can be portrayed in a positive light by our own people. With this foundation we will be able to enter the 21st century with confidence-confidence that our cultural identity will play an important role in laying a solid foundation down for our descendants. Our descendants will fill those leadership roles that require an understanding and respect of themselves and other cultural groups. We will once again become whole—a complete person—that is the ultimate goal of the Yup'ik people. 🔪

## Athabascan Region

by Amy Negalt Denlebedze Van Hatten

Searching the ANKN website on how to utilize technology and how to research available documents drawing upon online resources, I clicked once in the SPIRAL curriculum chart for the ninth-grade level. In choosing the theme "Language/Communication," up came the publication *Dinaak'a: Our Language* by David C. Henry, Marie D. Hunter and Eliza Jones (1973). Included in the publication were the following comments by former Alaska state senator John Sackett:

Where before the white man came the Native was extremely self-sufficient and had to rely wholly on the land and the resources that the land gave him, for a period the Native came to rely on the ways of the white man and unfortunately took on many of his bad characteristics.

The past decade however has seen a fantastic change in the attitudes of the Native people throughout Alaska. At the same time that the Native people are learning more about the Western culture, they are taking an ever rising interest in the heritage and culture of their own people. Native people are demanding a voice in the education of their children, health of their families and the laws that govern their lives. As a strong part of this there is the desire to retain and learn their own language.

It has been said that a people die when their language dies. The meaning of life and the world around us can be communicated truly only through our own language. From the knowledge of our own language we can continue to retain our pride in our culture and continue to grow as unique individuals.

The observations expressed by Senator Sackett in 1973 are consistent with those reflected in the *Alaska Standards for Culturally-Responsive Schools*: "A culturally-responsive curriculum uses the local language and

cultural knowledge as a foundation for the rest of the curriculum." That standard is also at the heart of the Alaska Rural Systemic Initiative.

The current initiative in the Athabascan region is to support the development of cultural atlases in the schools. It is a technological tool for students and community members to bring together information related to the indigenous knowledge systems using multimedia applications such as CDs and the Internet. Communities and Elders decide how much of the information should be shared and what should stay within the community due to cultural and intellectual property rights considerations.

Cultural atlases can help preserve cultural knowledge such as putting Native place names onto a map and incorporating information associated with each place. Themes such as weather prediction, edible and medicinal plants, geographic place names, flora and fauna, old villages, camps and burial sites can be incorporated with video and sound of language, oral stories and more from Elders. There are examples of what other regions have done with the cultural atlas initiative on the ANKN website. Watch for some exciting reports from the Athabascan region. 🔪

## Elder Highlight

by Amy Negalt Denlebedze Van Hatten

Illian Pitka Olin was born and raised in Nikoli Slough on the Koyukuk River. Her late husband was Freddie Olin, Jr. from Kokrines, Alaska. As I drove along the Chena River in Fairbanks with my *eenaa*, she commented, "Sgook, old Birch Park hunoda huneetl'aanh." She was affectionately calling my attention to her and saying she wanted to look around the old Birch Park neighborhood.

As soon as we arrived in the area that used to be low-income housing called Birch Park, she started reminiscing about the people who used to live there. Besides the Olins, there were other families including the Mayos, Carrolls, Solomons, Silas', Alfords, Nollners, McQuestions, Ahnupkanas and others. It was common to share whatever Alaska Native food they brought in from their home villages. In a substitute way, Birch Park was similar to a rural village. They spoke their Alaska Native languages and participated in cultural activities around town. They even initiated some of their own since they got to rent the recreational center on site. In addition, when a villager came to visit they invited their neighbors over to snack on dry fish and drink tea while they listened for news or stories about home.

With a dignified tone, Mom Olin said that the Salvation Army, located in a barn near Wendell Bridge, allowed her to exchange labor for her family needs. According to her, this enabled her to get her Alaska Native foods for her table. A steady exchange of Native foods, second-hand clothing, seasonal gear and accessories had the value of being freshly harvested to meet consumers' preference. Reciprocity was and still is a vital key for survival, no matter where one chooses to live. Accordingly, it was one of the most important cultural values car-

ried on from early upbringing in bush Alaska surrounded by extended family members.

In 1970 Mom Olin moved to Galena so her younger children could benefit from village life. Besides, the pipeline boom was raising her rent and her modest income was not enough to stay in Fairbanks. After her move, her late Aunt Madeline Solomon became one of her most memorable

mentors and Elder /teacher for a traditional way of life. Eventually she became Auntie Madeline's successor as the bilingual/cultural educator for the Galena City School District. Currently she is retired from the working world but remains a teacher to many friends and relatives and is doing it with immense joy. It tickles her when her great-grandchildren and adopted local teachers (who are far away from their real families in the lower 48) try so hard to learn and then succeed.

Mom Olin is thankful for those humble days when they were all happy to make do with what little they had. It has always been her wish for the younger generations to learn and appreciate the basics that are most important to survival and a sense of well being. In closing she thanked her ancestors of long, long ago who have not been forgotten.

Interviewer's comment: I thank Mom Olin with immeasurable gratefulness for all she has shared with me.

#### **ANKN Cultural Atlases**

by Sean Asiqtuq Topkok

ultural atlases are a means of documenting culture. The best source for this knowledge comes from Elders. How communities define and preserve their culture depends on locale and resources available. Audio and videotapes are tools for preserving knowledge, however, tapes can be damaged and valuable information could be lost. The computer is a tool utilized by many communities. If properly used, valuable cultural knowledge such as place names, genealogies, subsistence and more can be preserved, but it is not intended to replace cultural experts. The process of documenting cultural knowledge provides an opportunity for more interaction between the youth and Elders. The ANKN website has several examples of cultural atlases. They can be found at: <a href="https://www.ankn.uaf.edu/oral.html">www.ankn.uaf.edu/oral.html</a>

Occasionally people do not wish to share cultural knowledge outside the community. It is up to the community to decide what information to share. Since ANKN respects cultural and intellectual property rights, some of cultural atlases on the ANKN website are password-protected. Communities are encouraged to share how they are developing cultural atlases so that other indigenous people can adapt and apply them to their locale.  $\nearrow$ 

## Village Science: Risk

by Alan Dick

It is easy to point to the mistakes made by people who have been at the point of impact of technological change in Alaska. I remember one homesteader who tried to clear 80 acres of timber. He managed to knock down all the trees. It was a mangled mass of trunks and branches. He got real tired drilling stumps to dynamite them, so he ordered a power auger like we use today for drilling a hole in the ice. He was thrilled when it arrived. He started it and hopped up on a stump to drill his first hole. He revved the engine and spun himself around like an airplane prop. It's a wonder he didn't break both arms.

Another homesteader built a nice place but was afraid it would burn in a summer fire. He got some phosphorous fusees to do a controlled backfire in case a blaze endangered his home. Somehow, his fusees ignited and burned his homestead to charred rubble. To this day, there is an indentation in the ground etched by the fuses intense heat.

On the other hand, I know a woman raised in the woods whose husband bought her a plastic timer for cooking. She thought it was a thermometer, put it in the oven, and melted it into a gooey blob long before the

cookies were done. And most regions of Alaska have a story of some lonely old man who ordered a woman from a Sears catalog and was highly disappointed when only her clothes arrived.

For people who are bombarded with new technologies everyday, these examples may sound foolish, but they are stories of folks who were on the edge of technological upheaval and tried to apply past experience to current situations. They are anecdotes of folks who dared to try something new. As schools cope with the demands placed upon them by state



standards and the reality of their villages, some will withdraw to the safe territory of textbooks and pre-fab educational kits developed by "experts." Others will boldly innovate.

I just returned from a Yup'ik village where the middle school curriculum is being developed around the subsistence calendar. Science, math and social studies are the content areas. Reading and writing are seen as a means of accomplishing them. Bold? Yes. Successful? Not yet. Alaska has been made by people who have applied new twists to old solutions and old solutions to new situations. Will we be paralyzed by the fear of failure? Will we blindly conform to a Lower 48 standard piped to us via cable TV and textbooks from Texas? Or will we remain faithful to the adaptive character of Alaskans of the past? As we struggle through these risky transitions, failures like the above stories will occur, but heroes and lasting educational change will also emerge. 🔭

University of Alaska Fairbanks Alaska Native Knowledge Network/Alaska RSI PO Box 756730 Fairbanks AK 99775-6730

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