



Sharing Our Pathways

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A newsletter of the Alaska Rural Systemic Initiative
Alaska Federation of Natives ♦ University of Alaska ♦ National Science Foundation ♦ Annenberg Rural Challenge

Native Teachers' Associations Pave New Pathways in Education

In this issue of *Sharing Our Pathways*, we are focusing on the various Native teacher associations that have formed in Alaska. We feel it is important for Native teachers, parents, community members and other various organizations to know that the following Native teacher associations exist, what their experiences have been and what their accomplishments and current activities are.

Indigenous people around the world are "coming out" with their own perspectives of schooling and working on pedagogy and culture-based curriculum so that it is a posi-

tive schooling experience for the children from the different Indigenous groups. Alaska Native teachers are in the forefront with their colleagues across the nation and internationally.

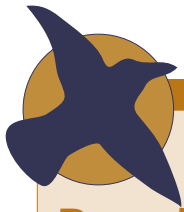
There are currently five formally-organized associations in Alaska and several more in the developmental stage. In this issue are reports from the Alaska Native Education Council, a statewide organization, and the Alaska Native Education Student Association, a University of Alaska Fairbanks student group. ✨

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Teachers Sharon Attla and Ruth Folger wring out a wet moose skin at the Academy of Elders 1997 Dinyee Camp. For more information on the camp, see the AINE article on page 5.





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The Alaska Native Educator Associations and the Alaska Native Knowledge Network invite you to participate in the

1998 Native Educator's Conference

Anchorage, Alaska
February 1-3, 1998
Anchorage Sheraton Hotel

Alaska Native Educators' have recently formed a series of regional associations to support initiatives aimed at addressing issues related to Alaska Native education. These associations will serve as the host for the 1998 Native Educator's Conference, to be held in conjunction with the annual Alaska Bilingual/Multicultural Education/Equity Conference. The Native Educators' Conference will provide an opportunity for people engaged in education that impacts Native people to come together and learn from each other's work and to explore ways to strengthen the links between education and the cultural well-being of indigenous people.

Information

For a registration packet and further information, contact Lolly Carpluk, Alaska Native Knowledge Network, University of Alaska Fairbanks, Harper Building, PO Box 756730, Fairbanks AK 99775-6730.

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We welcome your comments and suggestions and encourage you to submit them to:

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UAF Spring 1998 Course Offerings

The following graduate education courses will offered through the UAF distance education program during spring semester, 1998. Inquiries regarding enrolling in these courses may be directed to any of the rural campuses, or to the Center for Distance Education at the following address:

Center for Distance Education & Independent Learning, 130 Harper Bldg, University of Alaska Fairbanks, phone 907-474-5121, fax 907-474-5402, <http://uafcde.uaflrb.alaska.edu>

ED F603-DB1, 3 cr, **Field Study Research Methods**; Carol Barnhardt (Fairbanks) Audioconferences: W, 6:50-7:20 pm weekly

ED F616-DD1 3 cr, **Education and Socioeconomic Change**; Ray Barnhardt (Fairbanks) Audioconferences: T 6:50-8:20 pm weekly

ED F631-DD1, 3 cr, **Small Schools Curriculum Design**; Ray Barnhardt (Fairbanks) Audioconferences: R 6:50-8:20 pm weekly

ED F635-DB1, 3 cr, **Strategies for Cooperating Teachers**; Roger Norris-Tull (Dillingham) Audioconferences: M 5:10-6:40 pm weekly

ED F689-DD1, 3 cr, **Proseminar in Applied Education**; Staff Audioconferences: none

ED F693-DI1, 3 cr, **Math: Using Culture & Environment**; Claudette Bradley-Kawagley (Fairbanks) Audioconferences: M, W 5:10-6:05 pm weekly ✕

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(continued from previous page)

but should come to the pupil from the actual practice of useful occupations . . . Things are to be explained, then, not by supernatural causation, but by their place and function in the environment” (p. 568). The importance of this statement is what SEANEA is trying to incorporate into the schools. That is to help Alaska Native students use their environment and culture to understand the hypothesis of a liberal education.

SEANEA will be influential in

bringing Alaska Native ways into our schools because it embodies what Dewey states when he says, “The aim of the political order is to help the individual to develop himself completely; and this can come only when each shares, up to his capacity, in determining the capacity, in determining the policy and destiny of his group” (p. 572). I interpret this to say that Alaska Native people know best how they live and learn and must participate in the education of their children. ✨

Struggle

It's a struggle
Developing Solidarity.

It's a struggle
Being Positive

It's a struggle
Making Common Unity.

It's a struggle
LIVING.

It's a struggle
Because it's slow
But if we Struggle
At developing Solidarity,

Being Positive
Shaping Reality,
Making Common Unity,
We will all Grow

Because to struggle
Is to work for Change,

and Change is the focus of Education,
and Education is the Basis of Knowledge,
and Knowledge is the Basis for Growth
and Growth is the Basis for

Being Positive and Being Positive
is the Basis for Building Solidarity
Building solidarity is a way to shape
Reality and Shaping Reality is Living
and Living is Loving,

So Struggle ✨

—Mel King, 1981, Director of Community Fellows Program, Department of Urban Studies and Planning at the Massachusetts Institute of Technology

Association of Interior Native Educators (AINE)

by Rita O'Brien

The Association of Interior Native Educators (AINE) had a successful and exciting spring and summer. On May 20, 1997 the planning session for the Academy of Elders Camp was held with the AINE board meeting. At the 1997 Academy of Elders Camp, where rain kept everyone under blue tarps and the rising Yukon River carried numerous flows of sticks and trees, elders taught and teachers learned many traditional skills, finding that our Athabascan people were, and are, still proficient, scientific and practical. At the fourth annual AINE conference held in August the participants evaluated the presentations as superb or very good. Before fall set in, two new persons were elected to the AINE board.

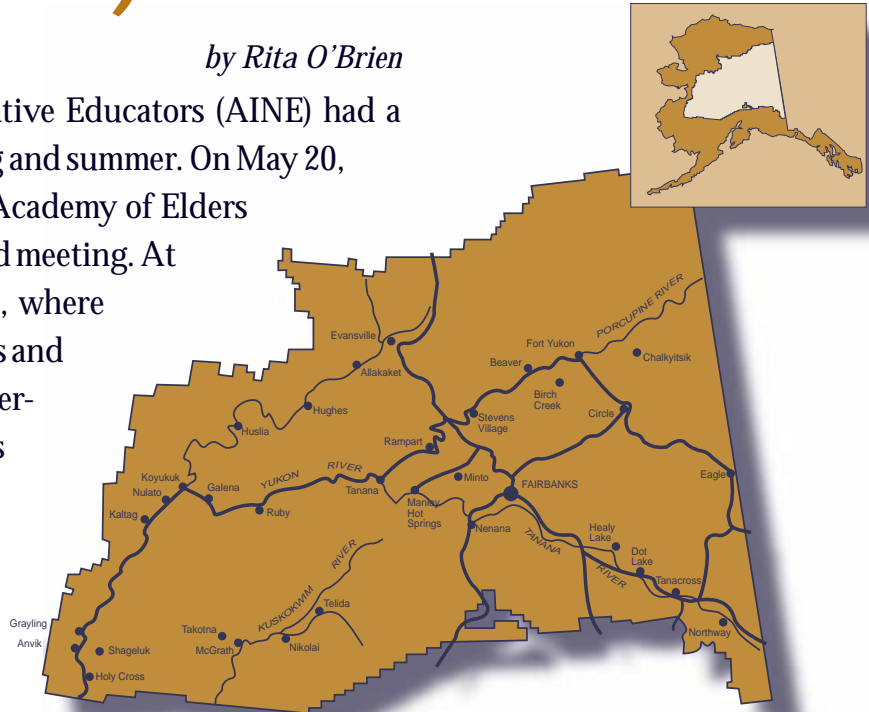
The Second Annual Academy of Elders was held June 14–22, 1997 at the Dinyee camp outside of Stevens Village. The camp was sponsored by AINE and the Alaska Rural Systemic Initiative (AKRSI). Four elders shared their knowledge, experiences and skills with Interior Native teachers in a fish camp setting. David Salmon, TCC's second traditional chief, taught about traditional tools in addition to telling many stories. He spent much of his time being thankful to God while showing teachers how to make the *toh* (Indian walking stick) which they all had the opportunity to form

out of birch trees. He was assisted by Kenneth Frank of Arctic Village who shared tools from his region along with humorous and amusing traditional games. Lina Demoski patiently taught the process of gathering materials and making spruce root/willow baskets. Lillian Pitka shared her life experiences as an elder of Stevens Village. Elsie Pitka demonstrated and encouraged teachers in the laborious process of tanning a moose skin. All of the teachers came away from the camp with the enthusiasm and resources they needed to prepare a culture-based unit of lesson plans in mathematics that meet the state's academic standards for students (PreK–12). Jerry Lipka was the University of Alaska Fairbanks instructor who stayed at Dinyee Camp and assisted teachers in exploring this type of curriculum development. Teachers were given

the opportunity to receive college credit by taking ED 693, Ethnomathematics. Teachers who took the course and are currently developing and teaching culture-based mathematics in the places they live are Gertie Esmailka, Huslia; Caroline Frank, Arctic Village; Ruth Folger, Minto; Carole Hess, Fairbanks; Carol Lee Gho, Fairbanks; Rita O'Brien, Nenana; Linda Woods, Fairbanks; Michelle Amundson, Fairbanks; Virginia Ned, Hughes; Sharon Attila, Fairbanks and Eleanor Guthrie, Fairbanks.

The Birch Tree Curriculum Institute was held July 31 through August 2, 1997 in Fairbanks. Several participants from the first Academy of Elders attended. Curriculum kits initiated by the institute are expected to be finished in December.

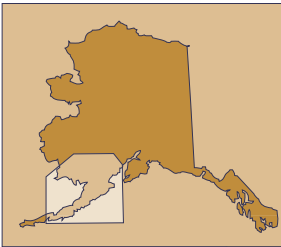
The Fourth Annual AINE Conference
(see AINE, page 10)



Ciulistet Report: Overview of 1996-97 School Year

This year has been very busy for the Ciulistet Research Association. Although we had only one major meeting in Dillingham this school year, we've been very busy with many other activities. Some of those activities were in gathering and documenting traditional Yup'ik knowledge in specific areas such as mouse food gathering; the great war stories that were witnessed in the Bristol Bay area; oral legends *The Five Sisters*, *The Pike and the Bull Head* and *The Blackfish*; documenting the Creation story and the symbolism of the drum at the LKSD

bilingual spring conference; identifying items from the Bristol Bay area at the National Museum of the American Indian Smithsonian Institution Research Lab in New York



by Arnaq Esther A. Ilutsik

City; furthering the development of specific units that apply to traditional Yup'ik knowledge such as the traditional Yup'ik border patterns, traditional Yup'ik game of *Kakaanaq*, the Legend Sonor Board game and expanding the heartbeat unit to the third grade level; also sharing the unique process used by the Ciulistet Research Association in collecting, documenting and developing traditional Yup'ik knowledge with other educators at the state, national and even at the international level.

The Ciulistet Research Association's meeting in Dillingham focused on documenting traditional geographical place names within the region. Many areas were identified with in-depth stories that were associated with these places. Certified teachers and paraprofessional educators were given the opportunity to enroll in a special topics course, ED 193/ED 593 Traditional Geographical Place Names and Its Application for Schooling, for one credit. In this session, the participants developed a lesson using the traditional geographical places names within their area. These lessons were taught in the classroom and the results will be shared at the next meeting scheduled for the fall in the small village of Ekwok. ✨

Association of Native Educators of Lower Kuskokwim (ANELK)

by Nita Rearden

The Lower Kuskokwim School District (LKSD) curriculum bilingual department coordinated and supported the third annual summer institute in which some of the Association of Native Educators of Lower Kuskokwim members participated.

The emphasis was to develop Yup'ik curriculum materials during the summer of 1997. The participants worked together to develop theme units to meet the state content standards with the focus on reading instruction. The information for guided reading program was provided by Marta Russell and Pam Yancy, both teachers from Mikelnguut Elitnaurviat school. This was excellent instruction for those participants who are now in

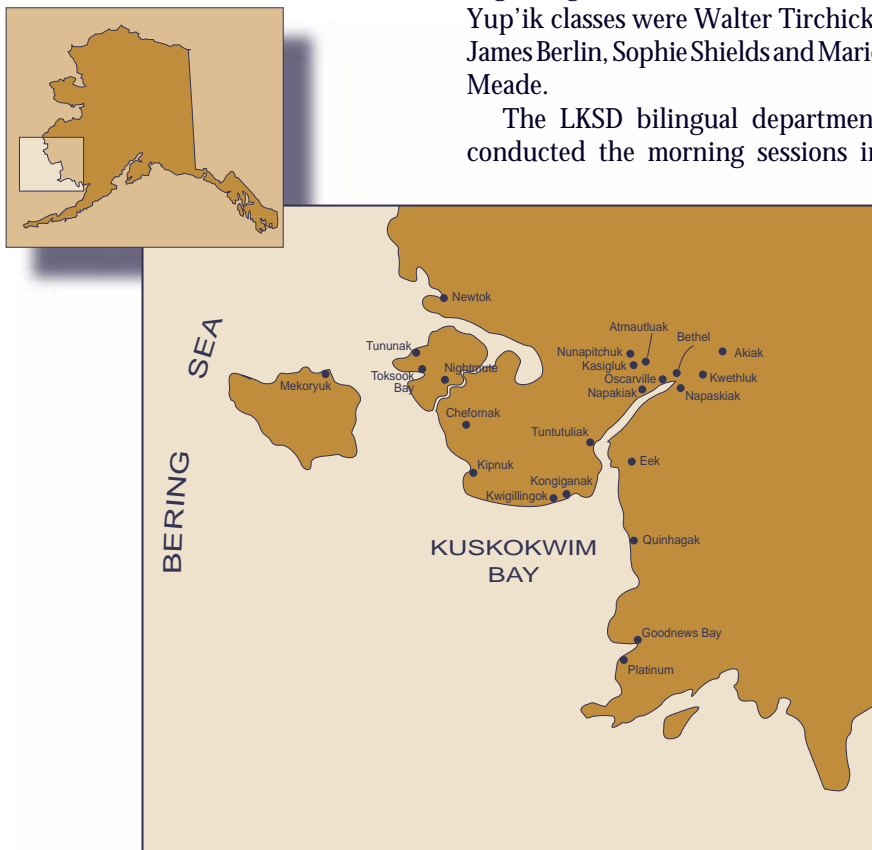
the Rural Educators Preparation Partnership Program (REPP). The participants received college credit that will apply toward certification in elementary education through REPP over the next few years with the support of the school district and the individuals' families. The participants also polished their Yup'ik writing skills through the instruction of the Yup'ik orthography instructors from some of our schools. The instructors of the beginning, intermediate and advanced Yup'ik classes were Walter Tirchick, James Berlin, Sophie Shields and Marie Meade.

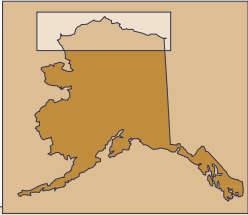
The LKSD bilingual department conducted the morning sessions in

reading methods for four weeks with afternoon sessions for science, math and social studies. The instructors included LKSD's curriculum bilingual department employees Bev Williams, Kathy Gross, Nancy Brown, Willard Waite, Gerald Scarzella, Duane Magoon and Nita Rearden. The participants translated and leveled trade books appropriate for use in Yup'ik language, classroom instruction and cultural units. The Institute also provided the opportunity to have the participants work with computers to record the lessons, activities and translations according to the skills of the individuals. The teachers spent a great deal of time drawing and writing their own books as part of their homework. The finished products were reviewed by other teachers involved in the making of books with the Yup'ik orthography group. The books will be added to the other published Yup'ik story books of LKSD.

Each afternoon throughout the Institute a group of Yup'ik language teachers reviewed and modified the 1996 prepared activities under the theme units that each Yup'ik teacher implemented during the year of 1996–97 school year. The activities were developed and modified with the assistance of Yup'ik elders. The elders who have participated since the first year include Elena Charles, Frank Andrew, Paul and Martina John, Theresa Moses, Bob Aloysius, David O. David, Carrie Pleasant, Nick Lupie, Mr. and Mrs. Brink, Henry Frank and James Guy, Sr. Thanks to many of our Yup'ik people who are eager to help us develop our own materials.

(see ANELK, back page)





North Slope Iñupiat Educator's Association



by Martha Stackhouse

primary purpose of NSIEA is to support and be a voice of North Slope Iñupiat Educators and to serve as an advocate for North Slope Iñupiat Education. The first goal is to promote Iñupiaq knowledge and language. The second is to promote and support Iñupiaq language training. The third goal is to develop and identify Iñupiaq language standards of learning and competency. The fourth is to promote teaching and to regard education as an important field of employment now and in the future. A policy was introduced to give all North Slope Iñupiat language teachers improved working conditions such as longer classroom time to teach, larger classroom size and have certain teaching equipment available. Some of the NSIEA board members attended the North Slope Board of Education meeting to make them aware of the teaching conditions that some of the teachers are facing.

The NSIEA drafted two resolutions. The first resolution, 97-01, wanted the Iñupiat History Language and Culture (IHLC) to start ensuring that their information be more accessible to the schools. The information was accessible only during working hours. As a result, their data base has been entered into the Public Library system and the teachers will have access to them in the evenings. They hope to enter more information into the NSB School District in the near future. The second resolution, 97-02, was submitted to the NSBSD Board of Education calling for the Iñupiat Language Teachers (ILT) teaching schedules be more than 15 minutes and that their classroom conditions be in par with the regular teachers.

(continued on opposite page)

The Ilisagvik College initiated a borough-wide education meeting held in conjunction with the North Slope Borough School District (NSBSD) in March, 1996 to discuss issues and concerns of Iñupiat education. As a result of that meeting, the North Slope Iñupiat Educators' Association was created.

The first North Slope Iñupiat Educator's Association (NSIEA) Annual membership meeting was held district-wide through compressed video on April 22, 1996. The by-laws and articles of incorporation were introduced and revised. The following objectives were declared: Letters opposing English-only legislation will be sent out and the NSB Iñupiat History Language and Culture (IHLC) materials need to be more accessible to all the schools.

There are different varieties of membership and fees:

1. Certified educator involved in education who has or is in the process of attaining certification (\$25.00),
2. Degreed member who has a degree and working in the field of education (\$25.00),
3. Associate member who has interests in goals of education (\$25.00),
4. Affiliate members who are categorized as "others" and have no vote (\$15.00) and

5. Honorary members are Iñupiat elders who do not have to pay a fee.

The second regular meeting was held on September 13, 1996. Edna Ahgeak MacLean, president of Ilisagvik College, was the special speaker and gave a brief report on the Teacher Education Program. The by-laws and the articles of incorporation were adopted. The following individuals were nominated and elected as board of directors: Emma Bodfish, president; Martha Stackhouse, vice-president; Arlene Glenn, secretary; Martha Aiken, honorary elder; Flossie Andersen, treasurer and Terry Tagarook and Kathy Itta Ahgeak, board members. A board meeting was held to determine the seats. In October we were successful in having Emma Bodfish and James Nageak elected as board members to the Alaska Native Education Council (ANEC).

Goals and objectives of the NSIEA were identified in the January 29, 1997 membership meeting. The pri-

ANEC 1997 Conference Update

by Virginia Thomas

The Alaska Native Education Council (ANEC) held their 11th Annual ANEC Statewide Conference. The conference was held at the Westcoast International Inn in Anchorage, October 5–6, 1997.

Those attending the conference had a great time sharing ideas, interacting with facilitators on educational issues and formulating education resolutions to be submitted to the Alaska Federation of Natives convention.

The ANEC board of directors designed the 1997 conference to be informative and target areas such as Successful Parent Involvement, Alaska Native Issues, Future Alaska Native Teachers and Alaska Standards Forum. The forums targeted the issues that are facing us in the field of Native education both within Alaska as well as nationwide.

The Alaska State Commissioner of Education, Dr. Shirley Holloway, was a guest speaker and held three discussion groups on the Alaska State Standards in Education. The ANEC participants were able to ask questions of the commissioner and provide an insight of their own personal views of the standards and how they affect the students in their villages.

We were very grateful to the commissioner for taking time to meet with the ANEC members and explaining “How does the Alaska Education Standards Affect Alaska Natives?”

During the conference Paul John, a traditional cultural specialist, gave the keynote address. He provided a much needed reminder of the importance of education from an elder’s view point. He pointed out that an education is not to be taken lightly but to evolve from both books and life experiences. We would like to thank Mr. John for sharing a little of his life experiences with us.

Also during the conference the ANEC membership developed and passed three resolutions that will be forwarded onto AFN for consideration during the AFN convention. Resolution 97-01 focuses on opposition to English-only legislation. Resolution 97-02 focuses on the State of Alaska’s commitment to Native language preservation through educa-

tional programs. Resolution 97-03 focuses on the preparation of Alaska Native educators.

The Alaska Native Education Council over the past year has been a strong and vocal advocate for improvement in Native education both within Alaska and on a national level. ANEC is the current advisory committee to the Alaska Regional Comprehensive Center. It assisted in planning and implementing the 1997 Alaska State Bilingual Conference; it assisted the Alaska State Department of Education in developing the Native Student Action Plan; participated in the third Annual International Mathematics and Science Study; has set up a network for information exchange with the National Indian Education Association, the Tribal Education Contractors Association, the National Johnson O’Malley Association and has recently been asked to act as the Native Education Advisory Committee for the Alaska State Department of Education.

All of this work was accomplished because of the dedication, commitment and volunteer time of the ANEC board of directors. The 1997–98 ANEC board and alternates are as follows:

Virginia Thomas, chair, Anchorage
Bernadette Alvanna-Stimpfle, Nome
Agnes Baptiste, Nome
Emma Bodfish, Barrow
Phyllis Carlson, Juneau
Della Cheney, Sitka
Rebecca Gallen, Northway
Teresa Germain, Juneau
Charles Kashatok, Bethel
Susan Murphy, Bethel
Shane McHale, Anchorage
James Nageak, Barrow
Luanne Pelagio, Anchorage
Jennifer Romer, Bethel/Fairbanks
Violet Sensmeier, Yakutat
Patricia Shearer, Anchorage ✨

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This summer Dr. Ray Barnhardt visited Barrow to attend the Naval Arctic Research Lab (NARL) 50th Anniversary Science Conference. Many scientists came to commemorate the Iñupiat people’s knowledge about their Arctic environment. Dr. Barnhardt and Esther Ilutsik (Ciulistet Research Association) gave more information about the Alaska Rural Systemic Initiative (AKRSI). The NSIEA

will work with AKRSI to further the Native Ways of Knowing initiative. We are now in the process of selecting the elders for the Academy of Elders.

The NSIEA is a year old and we have a good start. We are now completing the 501 (c) (3) Application for Recognition of Exemption which will enable us to apply for grants. The organization hopes to start scholarship programs for those who are pursuing teaching certifications. ✨

Alaska Native Education Student Association (ANESA)

by Jennifer Romer

The Alaska Native Education Student Association (ANESA) is a student club that is based at the University of Alaska Fairbanks (UAF) campus. The primary target of ANESA is to look at issues surrounding Alaska Native and rural education. The majority of ANESA's membership is made up of education majors at UAF but our bi-weekly meetings are open to anyone who has interest in Alaska Native and rural education issues.

ANESA was organized to provide a support network through various activities such as bi-weekly meetings featuring guest speakers from the education field, dissemination and discussion of information regarding Alaska Native and rural education and organization of study sessions for various education courses offered at UAF.

ANESA participates in the examination of various policies regarding the education of Alaska Native students. The club has participated in giving recommendations to various individuals or organizations about teacher preparation and other issues related to the education field.

ANESA hopes to set up a strong network system with the rural cam-

pus education students and the various Native teacher associations throughout the state. Our new officers for the 1997-98 school year are:

Faculty adviser: Carol Barnhardt, Fairbanks

President: Jennifer Romer, Bethel

Vice President: Jay Craft, Nome

Secretary: Christina Hamilton, Craig

Treasurer: Kim Ivie, Fairbanks

If you are interested in finding out more about our club and the activities we participate in, please contact us at: ANESA, c/o Carol Barnhardt, School of Education, PO Box 756480, Fairbanks, AK 99775-6480 or e-mail us at fsjrr@uaf.edu. Our physical location is 714 B Gruening Building on the University of Alaska Fairbanks campus. ✨

(AINE continued from page 5)

Dinjii zhuh toh haa tr'aswandai (Athabaskan Walking Stick: Staff of Life). David Salmon from Chalkyitsik gave a wonderful description of the *toh*. It symbolizes a helper, friend and companion. It was used for thousands of years by the Athabaskan people of Alaska. In one year's time, the *toh* is much shorter because of all of the traveling they did (using his hands, David shows about one foot of space). "The people came into this country with the help of a walking stick." The conference had many interesting sessions: *The Soos Model/Traditional Medicine*, *Academy of Elders Camp*, Navajo Physicist, Fred Begay on Na-

vajo Model of Teaching, *Fishnet Making With Willow Bark and Twine*, *American Indian Science and Engineering Society (AISES) Summer Camp*, *Willow Root Basket Making*, *Gwich'in Math*, *Accessing the World Wide Web and Curriculum Resources* and *Graduate Opportunities*.

During the annual meeting the AINE board of directors elected two new persons to the board: Helen Huffman and Linda Woods. The chair is Eleanor Laughlin of Nulato/Fairbanks; the vice-chair is Linda Woods of Fairbanks; the secretary is Virginia Ned of Allakaket/Hughes and the treasurer is Helen Huffman of Huslia. The

1996-97 AINE coordinator, Virginia Ned, accepted a position as principal-teacher of Hughes School. Rita O'Brien-Marta is the present AINE coordinator and is looking forward to working with educators in the Interior of Alaska. If you want more information about AINE, please call Rita at 474-6041. ✨



AISES Corner

(American Indian Science and Engineering Society)

A new school year is well on its way. AISES students are busy with science fair projects. Excitement is rising as they get ready to enter projects in the first annual AISES science fairs in the Interior and Arctic regions of Alaska.

The Arctic Regional Science Fair will be held in Kotzebue, November 20–22, 1997. Students will enter projects from the North Slope Borough School District, Northwest Arctic Borough School District, Bering Straits School District and Nome City Schools. The Interior Regional Science Fair will be in Fairbanks, Alaska at the Howard Luke Academy, November 20–22, 1997. Students will enter projects from the Alaska Gateway School District, Galena City Schools, Iditarod School District, Nenana Schools, Tanana School District, Yukon Flats School District and Yukon-Koyukuk School District.

Students will enter their project in any of 12 science categories plus two team categories (life sciences and physical sciences). The team categories allow for two or three students to work on one project. Each project will be previewed by a teacher, an expert in the field and an elder in the community. The hope is each project will not only follow the guidelines of the scientific methods, but will uphold Alaska Native cultural values and make a valuable contribution to Native knowledge and to the village community.

Each fair will have two sets of judges and awards. Teachers and scientists will judge projects for

their mastery of scientific method and contribution to science. They will judge projects for creative ability, scientific thought/engineering goals, thoroughness, presentation to judges and skill. Native elders will judge projects on their ability to maintain Native values, their contribution to Native cultural knowledge, to village community life and to issues pertinent to Native corporations.

Students will set up projects on Thursday, November 20, and attend an opening ceremony and traditional dancing in the evening. On Friday, November 21, they will have the opportunity to socialize and share in science activities similar to those experienced in the Imaginarium (exploratorium), along with discussing their projects with the judges.

by Claudette Kawagley-Bradley

The public will be invited to view the projects after the judging is over and purchase tickets to the awards dinner Saturday afternoon.

Twenty-nine students attended the Fairbanks AISES Science Camp 97 at University of Alaska Fairbanks and Gaalee'ya Spirit Camp. These students developed plans for science fair projects and had the opportunity to begin their research during the summer when Alaska has lots of plant life and wildlife activity to explore for science projects. They have some advantage over other students who begin projects at the start of the academic school year. It also gave them access to elders who provided the cultural knowledge that gave them an alternate framework for their project.

We are looking forward to this new style of science fairs in Alaska and hope it will set a precedence in preparing Native students for more effective leadership in the twenty-first century. ✨



Kristopher John, a student from Ft. Yukon, works on a science project at the '97 AISES Summer Camp held at Gaalee'ya Spirit Camp. Kristopher is interested in the weather, particularly tornadoes.

Alaska Standards for Culturally Responsive Schools: Teachers

by Ray Barnhardt

In an effort to provide some guidelines for communities and schools that are attempting to implement the various initiatives of the Alaska Rural Systemic Initiative and Rural Challenge, we have begun to spell out the underlying principles from which we are working and have put them in a “standards” format for consideration by Native people around the state. At this point, we have drafted cultural standards for students, teachers, curriculum and schools.

The cultural standards for students was printed in the last issue of *Sharing Our Pathways* (Vol. 2, Issue 4). The cultural standards for curriculum and schools will be included in later issues. We emphasize that these are draft standards and invite extensive discussion and comments to help us refine them and eventually put them out for general use throughout the state. If you have any suggestions, please forward them to any of the AKRSI staff.

Cultural Standards for Teachers

A. A culturally responsive teacher incorporates local ways of knowing and teaching and creates multiple opportunities for students to learn from Elders in ways natural to the local culture.

Teachers who meet this cultural standard:

1. involve elders in their teaching in multiple ways;
2. make available the opportunity for students to learn from elders in settings where they are comfortable and the knowledge and skills they are teaching are naturally relevant;
3. provide opportunities for students to learn through observation and demonstration of cultural knowledge and skills;
4. pay attention to and are respectful of the cultural and intellectual property rights that pertain to all aspects of the

local knowledge they are addressing;

5. recognize the validity and integrity of the traditional knowledge system.

B. A culturally responsive teacher uses the local environment and community resources on a regular basis to link what they are teaching to the everyday lives of the students.

Teachers who meet this cultural standard:

1. regularly engage students in appropriate projects and experiential learning activities in the surrounding environment;
2. utilize traditional camp settings as a learning environment for both cultural and academic knowledge and skills;
3. provide integrated learning activities organized around themes of local significance and

across subject areas;

4. are knowledgeable in all the areas of local history and cultural tradition that may have bearing on their work as a teacher, including the appropriate times for certain knowledge to be taught;
 5. seek to ground all teaching as a cumulative process built on the local cultural foundation.
- C. A culturally responsive teacher participates in community events and activities in an appropriate and supportive way.

Teachers who meet this standard:

1. foster a holistic approach to education by seeking to become active members of the community in which they teach and to make positive and culturally appropriate contributions to the well being of that community;
2. recognize the professional responsibilities associated with the role of a teacher and exercise those responsibilities accordingly in the context of local cultural traditions and expectations;
3. maintain a close working relationship with and make appropriate use of the cultural and professional experiences of their colleagues on the school staff who are from the local community.

D. A culturally responsive teacher works closely with parents to achieve a high level of complementary educational expectations between home and school.

Teachers who meet this cultural standard:

1. make arrangements for regular visits to the homes of their students and promote extensive community school interaction and involvement;
 2. involve parents and local leaders in all aspects of instructional planning and implementation;
 3. seek to continually learn about and build upon the cultural knowledge that students bring with them from their homes and community;
 4. seek to learn the local language and utilize it as appropriate in their teaching.
- E. A culturally responsive teacher recognizes the full educational potential of the students with whom they are working and provides the challenges necessary for them to achieve that potential.

Teachers who meet this standard:

1. recognize cultural differences as a positive attribute around which to build appropriate educational experiences;
2. provide learning opportunities that help students recognize the integrity of the knowledge they bring with them and use that as a springboard to new knowledge;
3. reinforce the student's sense of cultural identity and place in the world;
4. acquaint students with the world beyond their home community in ways that expand their horizons while strengthening their own sense of worth and appreciation of the contribution of their culture to the integrity of the world as a whole.
5. provide opportunities for non-Native as well as Native students to understand the importance of learning about other cultures and appreciating what each culture has to offer. ✨

Alaska 4-H Fisheries, Natural Resource and Youth Development

by Peter J. Stortz, Extension 4-H Fisheries and Natural Resource Specialist

In 1990 there was considerable interest on the part of several Alaska legislators in helping fishermen on the Yukon River maintain their livelihood. Decreasing harvest of salmon and international disputes over salmon on the Yukon provided the context for a meeting of Yukon fishermen that took place in Galena in December, 1990. At the meeting, fishermen from the mouth of the Yukon to Eagle near the Canadian border met and formed the Yukon River Drainage Fisheries Association (YR DFA).

The objectives of YR DFA were to increase the numbers of fish in the river, enhance the management of the fisheries and seek to educate people about the fisheries. At the meeting the Alaska 4-H program agreed to develop a fisheries education program for youth in the villages. The UAF Alaska Cooperative Extension, received a series of grants from the US Department of Agriculture and the help of many collaborators to work with youth-at-risk in rural Alaska. The Alaska 4-H Fisheries, Natural Resource and Youth Development Program began in June 1991 in ten Yukon River Drainage communities. Since then, the program has grown and expanded north and south to include over 50 communities and 22 school districts across the state.

The program is designed to train village youth in science and math skills through fishery biology and hands-on learning. It is a far-reaching and long-term educational and community effort requiring the support of state, schools and residents of many Alaska villages. It continues today

through the US Dept. of Agriculture grant to the 4-H program *Strengthening Alaska's Children, Youth and Families*—a three-part project including youth development, parenting education and health and safety.

Scope and Strategies of the Program

- Public schools provide classroom instruction in the science of fisheries biology, management and aquaculture technology through the use of in-classroom salmon-egg incubators. Youth have access to the incubators on a daily basis.
- Schools receive Power Macintosh® computers, modems and Internet access to connect students with others participating in the program and the World Wide Web.
- Students are responsible for water exchanges, water quality, temperature monitoring and predicting and reporting developmental stages of salmon.

(see 4-H Fisheries page 15)

Active Reality Research, Part III

Parts I and II of Active Reality Research appeared in the last two issues of Sharing Our Pathways. This is the third and final article in this series.

From all indications, nature thrives on diversity. Look at the permutations of weather during a day, month or year. Climates differ from one part of the earth to another. Flora and fauna differ from one region to another. Continents and their geography differ. No two snowflakes are exactly alike. The stars, constellations and other heavenly bodies seem to be unchanging, yet our learned astronomers tell us that many changes are taking place. According to them, novae, supernovae, black holes, stars dying and being born and so forth are happening in the universe. The science of chaos and complexity shows us a diversity of patterns we never thought existed in nature. These all point to diversity—the balance that makes nature thrive. The Alaska Native people knew this and strove for harmony with all of life.

Alaska Native people have come full circle and are seeking to heal the breeches that have put life asunder. *Seggangukut*, we are awakening, we are being energized, is what the Yupiaq say. They have nature as their metaphysic and have drawn energy from earth whereby things in times past were often quite clear and thus could be attended to or a resolution reached. One aspect of energy exchange that has often been spoken of by Native people who are ill is that of being visited by various people from the community to show care and love for the ill person. They have expressed the feeling that some people will cause the person to feel worse while another person will make the person stronger and clearer of mind. It is said that in the former case, a person who does not have the right mind or balance in life will draw energy from the ill person thereby making the ill person worse than before the visit. On the other, there will come a person who is kind, upright and is with a mind of

making you better. Instead of drawing energy from the ill person, this person shares some of his/her energy with the sick person. The ailing one feels better.

Another example of energy exchange is the story of a man out on the ocean. He gets caught on an iceberg that gets cut off from shore and drifts out. He has no choice but to try to keep warm and survive the night. The next day, he finds that the iceberg is stationary but is not attached to the shore ice. New ice has formed overnight in the water between. He remembers the advice of his elders that to test the newly formed ice and its ability to hold up a person, he must raise his ice pick about two feet above the ice and let it drop. If the weight of the ice pick allows the point to penetrate but stops where it is attached to the wooden handle, he can try crossing on the ice. If, on the other hand, it does not stop at the point of intersection, then it will not hold up the man. In this case, the former happened.

by Angayuqaq Oscar Kawagley

The man looked around him at the beauty, the might of nature, and realizing the energies that abound, he gets onto the ice. He must maintain a steady pace for if he stops or begins to run he will fall through because he has broken the rhythm and concentration. The story goes that when he began his journey across, there was a lightness and buoyancy in his mind. This feeling was conveyed to his physical being. Although the ice crackled and waded, he made it to the other side. He drew energy from nature and was in rhythm with the sea and ice and, coupled with lightness and buoyancy, made it safely to the other side.

In the another story, two youngsters come into being and they find themselves in an abandoned village. It has been some time since the people disappeared by indications from the decay of semi-subterranean houses and artifacts in the village. One possible explanation of why the people were gone might be that these Yupiaq people may have reached the apex of spirituality which is pure consciousness. Their bodies became the universe and their pair of eyes became part of *Ellam iinga*, the eye of the universe, the eye of awareness. This could explain how some communities became mysteriously deserted.

Western physics with its quantum and relativity theories say that we are mostly energy. Why then should not our spirit or soul be energy? Scientific technology has given proof of energy fields, personal aura, findings from near death experiences and many other human experiences. Theory of relativity tells us that matter is condensed energy and also conveys that the world is made up of relationships. Can we not then say that our spirit is made up of energy? If this is true, the

Alaska Native must be able to draw energy from earth because we are a part of it. All life comes from earth. Alaska Native peoples' metaphysics as nature becomes corroborated by the Western theories. This also strengthens the argument that the laboratory for teaching and learning should be placed where one lives. Being outdoors in nature enjoying its beauty and energy, and becoming a part of it, energizes the youngsters. This could bring back the respect of personal self, and if one respects oneself then certainly one would be able to respect others, nature and the spirits that dwell in and amongst all things of nature. The students will be able to whet their observational skills while learning from nature and drawing energy to themselves. They can again attain love and care with all its concomitant values and attitudes that give life. It is imperative that the students from all walks of life begin to experience and get close to nature. There is a vast difference in learning about the tundra in the classroom and being out in it. Being in and with it the whole year round, they can experience the vicissitudes of seasons, flora, fauna, sunlight, freezing, thawing, wind, weather permutations, gaining intimate knowing about place and using their five senses and intuitions to learn about themselves and the world around them.

It is this drawing of energy from nature that will allow the self to again become strong so that the breaks in the circle of life become closed. Then the individual and community can allow chosen outside values and traditions to filter in which they think will strengthen their minds, bodies and spirits. The Alaska Native people will again become whole people and know what to be and what to do to make a life and a living. They will have reached into the profound silence of self to attain happiness and harmony in a world of their own making. *Qiyana!* ✨

(4-H Fisheries continued)

- Technological literacy, watershed management and knowledge and understanding of math and statistical methods through fish counts and survival rate calculation are all part of the in-school program.
- Native elders build self-esteem in youth by fostering an appreciation of their cultural heritage and traditions associated with fishing.
- Through 4-H project clubs, youth engage in hands-on experiential learning, learn life skills and participate in community service.

Benefits for Village Youth

- Enhance science and math literacy among participating youth.
- Reinforce cultural values.
- Develop citizenship through community service.
- Acquire self-esteem through new skills.
- Prospect for future employment and higher incomes.

Benefits to Schools and Communities

- Broad-based, interdisciplinary, and culturally relevant curriculum.
- Hands-on learning program relevant to Alaska subsistence lifestyle.
- Extensive support network of participating school districts, agencies and organizations.
- Annual teacher in-service training.
- On-going support, resources and activities provided by UAF.
- On-going support, resources, activities, events and youth development opportunities through the Alaska 4-H program and the national Cooperative Extension system.

An annual teacher in-service has become the key to success of the in-school fisheries science education program. Teachers representing schools participating in the 4-H Fisheries, Natural Resource and Youth Development program attended the annual teacher in-service held in Fairbanks,

September 18–21. First year teachers starting in the school salmon project had a full day devoted to their needs. They were provided information about aquarium set-up, equipment maintenance, daily and weekly procedures, permit requirements, water chemistry and report writing.

Additional topics were presented throughout the in-service to assist teachers in utilizing natural resource and fisheries management issues as a vehicle to develop critical thinking skills in math, science, social studies and language arts. Activities were provided for both classroom and outdoors. A variety of hands-on learning used to demonstrate new curriculum and project materials included:

- using the internet—sharing with other teachers and students;
- fish anatomy and physiology—dissections;
- local egg-take procedures;
- fish bank simulation activities;
- new curriculum associated with genetics and fisheries management;
- protocols for data collection and data reporting; inquiry and science processes.

Amy Van Hatten, Alaska Rural Systemic Initiative (AKRSI) Athabaskan Regional Coordinator and Sean Topkok, AKRSI Indigenous Curriculum Specialist, were among the dozen presenters. Amy and Sean shared information about the Alaska Native Knowledge Network and new cultural standards through several activities and demonstrations. They helped the group of teachers acquire a new awareness, appreciation and knowledge about the AKRSI and invited participation in the coming year. What became obvious after their presentation were the numerous complementary objectives and outcomes of each of the programs. Teachers in the 4-H Fisheries, Natural Resource and Youth Development program are eager to develop new relationships and make applications of the information they received. ✨

(ANELK continued from page 7)

The theme units worked on included self role and identity, gathering food & animals, getting materials ready, celebration with masks, weather, clothing, ceremonies, survival skills, family/extended family, traditional toys and games, storytelling and preparation for spring and fishing/fish camp. The kindergarten through third grade activities were organized under the direction of Helen Morris and Carol Lagano, both retired teachers. It is still in draft form and much work needs to be done. The language maintenance group worked under the same theme units for grades 5-12 under the direction of Walter Tirchick along with the teachers who work in those grade levels. The units are being developed in a spiral learning form, meaning that all students learn about the same topic at a developmental level in subject area by grade levels.

In the 1997-98 school year, many of the Institute participants

Congratulations to Harley Sundown!

One of four Alaskan teachers to win a 1997 Milken Award!

Born and raised in Scammon Bay, Harley graduated from UAF. The last year of his teacher education program was spent in Cross-Cultural Educational Development (X-CED). He has been teaching for the last four years in Scammon Bay.



Harley with his mother, Maryann "Arnaucuaq" Sundown.

will take college classes for credit toward a degree program with the help of a mentor teacher. Hopefully, this partnership of the mentor teacher, student and the university personnel will allow the student to eventually complete a quality teacher certification program while working and liv-

ing in the community.

The 1997-98 ANELK board of directors are Walter Tirchick, president; Evon Azean, vice-president; Charles Kashatok, secretary-treasurer; Nita Rearden and Sophie Shields, members-at-large. ✨

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