



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



Elmer Jackson, Larry Duffy, Norma Holmgaard and Bernadette Alvanna-Stimpfle gather together in a working group at the recent Alaska Native Rural Education Consortium Meeting held in Sitka on April 23 and 24, 1997.

Alaska RSI Launches Into Summer!

by Dorothy M. Larson

The Alaska Native Rural Education Consortium (ANREC) spring meeting was held in Sitka on April 23–24, 1997. The meeting was held at Centennial Hall and our members stayed at the Sheldon Jackson College Campus. Thanks to our memorandum of agreement (MOA) partner, Sheldon Jackson College staff, Della Cheney and Sherri Steele for their assistance.

This spring consortium meeting provided an opportunity for the members to get acquainted with one of the five cultural regions of the Alaska

Rural Systemic Initiative (Alaska RSI) and the Alaska Rural Challenge (ARC) projects. During the meeting, the consortium heard reports from each of

the regional coordinators and partners who are doing the work in each region, as well as from those who are working on statewide initiatives.

Southeast Alaska region provided an in-depth report on last year's and the current year initiatives. Regional coordinator Andrew Hope introduced a number of the staff of the Southeast
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Kathy Ahgeak, Minnie Gray and Esther Ilutsik listen attentively at the Alaska Native Rural Education Consortium meeting in Sitka held April 23 and 24, 1997.

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MOA partners, elders, school district members and others including superintendent Bruce Johnson of the Mt. Edgecumbe High School who represented Dr. Shirley Holloway of the Alaska Department of Education.

There were over 60 people in attendance at the Sitka consortium meeting, including each of the regional coordinators and elders representing each of the regional elder's councils.

National Science Foundation Visit

A site visit was conducted by several people representing the National Science Foundation (NSF), including Deputy Director of Education and Human Resource, Dr. Jane Stutsman, Dr. Gerald Gipp, program officer of the Alaska RSI and Dr. Linda Warner of NSF. Two other individuals, Dr. Valerie Thornton from the Department of Energy and Dr. Nora Ramirez from the Phoenix Urban Systemic Initiative accompanied the NSF visitors. Their visit took them to schools located at Hoonah, Angoon and Tenakee Springs, as well as the Alaska State Department of Education, University

of Alaska Southeast, Mt. Edgecumbe, Raven Radio and the Channel Club.

Dr. Gipp provided a report to the group on the recent performance evaluation review in which each of the rural systemic initiatives participated. Dr. Ray Barnhardt of the Alaska RSI and Peggy Cowan of the Alaska Department of Education represented the Alaska RSI at the meeting. There were several recommendations which NSF provided to the Alaska RSI which we will be following up on.

Originally the Alaska RSI set as a goal that over 40 rural school districts would be impacted over the five years of the project. Given the scope of work, however, we may shift our emphasis from breadth to depth and concentrate our efforts on the current 20 districts which contain over 70% of the Native students in rural Alaska. We do not consider this a scaling back of our activities, but shifting our focus to provide more in-depth work with the current MOA partners. The intention is to achieve greater progress, success and impact of the Alaska RSI with concentrated effort rather than spread ourselves too thin across all the rural schools in the state.

The regional presentations at the consortium meeting provided a clearer understanding of each of the initia-

tives and the work that is in progress in each of the regions. As we move into the second year initiatives, it is exciting to hear of the progress that is being made in the various areas which directly impact the education of rural students in the math, science and technology subject areas. The work that is

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being done on the development and documentation of materials was impressive with CD-ROMs, the Frameworks documents, the curriculum materials collection, the Tlingit Math book, the Village Science book, the cultural atlas work, the work of the



Nick Pestriakoff speaks to the Alaska Native Rural Education Consortium at the April meeting in Sitka.



Andy Hope and Oscar Kawagley review issues pertaining to the Southeast Region of Alaska at the ANREC meeting in Sitka held April 23 and 24.

Alaska Native Knowledge Network and many others.

Following the consortium meeting a number of training sessions were held for the Southeast representatives involved in the use of Juke Box for cultural atlas work. The training was provided by Mary Larson of the Oral History Project. The regional coordinators and others were also involved with a training session on standards with Peggy Cowan of the Department of Education. Discussions will continue in this area in Dillingham where the Alaska RSI curriculum working group, staff and MOA partners will be working with the Alaska Native Science Education Coalition and the State of Alaska Department of Education.

As you can see the meeting was a busy one. Another change will occur this next year. The Alaska Native Rural Education Consortium will meet as a statewide group only once rotating to one of the regions that has not yet hosted it. In place of the second statewide consortium meeting, the re-

gional consortium partners, regional coordinators and co-directors will hold mini-consortium meetings at the regional level in the fall.

There will be a large number of regional activities and meetings which will be taking place throughout the year such as regional cultural camps, American Indian Science and Engineering Society (AISES) camps, Alaska Native Science Fair in November in Ambler and a technical assistance plan will be developed for implementing the same curriculum and assessment activities with the school district in the fall.

The hospitality of the Southeast region was outstanding. A potluck of traditional foods was held on Wednesday evening. The weather cooperated and during the early morning and late evening breaks, participants were able to enjoy the scenery, historical points, and the SJC, UAS and Mt. Edgecumbe campuses. ♦

Teaching/Learning Across Cultures: Strategies for Success

by Ray Barnhardt

The following is the third of three excerpts from an article addressed to teachers who are seeking guidance on how to best enter a new cultural/community/school setting and make a constructive contribution to the education of the children in that setting.

What should you teach?

Having negotiated your way into a new cultural community, how do you now integrate what you have learned into your teaching? Some of the first concerns you will have to confront revolve around the expectations of the other teachers, the school district and the community, not all of whom may be in agreement on where or how the local culture fits into the curriculum. As a professional, your first responsibility is to the students in your charge, but they do not exist in isolation, so you will have to balance consideration of their individual needs with consideration of the many other immediate and distant variables that will come into play in the course of their experiences as students and as adults in a rapidly changing world.

Your task is to help the students connect to the world around them in ways that prepare them for the responsibilities and opportunities they will face as adults. That means they need to know as much as possible about their own immediate world as well as the larger world in which they are situated, and the inter-relationships between the two. To achieve such a goal requires attention to the local culture in a holistic and integrative manner across the curriculum, rather than as an add-on component for a few hours a week after attending to the “real” curriculum. The baseline for the curriculum should be the local cultural community, with everything else being built upon and grounded in that reality.

Whatever piece of the curriculum you are responsible for, imbed it first

in the world with which the students are familiar and work outward from there. Adapt the content to the local scene and then help the students connect it to the region, the nation and the world. Keep in mind the adage, “Think globally, act locally!” as you prepare your lessons. If students are to have any influence over their lives as adults, they need to understand who they are, where they fit into the world and how “the system” works. It is your responsibility as a teacher to help them achieve that understanding.

When considering what to teach, keep in mind that the content of the curriculum is heavily influenced by the context in which it is taught. Think less in terms of what you are teaching and more in terms of what students might be learning. How can

you create appropriate learning environments that reinforce what it is you are trying to teach? Does an elder telling a traditional story have the same meaning and significance when done in a classroom setting as it would have out on the river bank or in the elder’s home? Most likely not, so carefully consider the kind of situational factors (setting, time, resources, persons involved, etc.) that may have a bearing on what your students are learning. Content cannot be taught apart from context—each influences the other. This is especially critical when cultural differences are present. In the end, your most important task is to help students learn how to learn, so while you are teaching subject matter, you also need to be attending to broader process skills, such as problem solving, decision making, communicating and inductive reasoning—skills that are applicable across time and place. It is skills such as these, learned in culturally adaptive ways, that enable students to put the subject matter they acquire to use in ways that are beneficial to themselves, their community and society as a whole.

How should you teach?

There are as many ways to teach as there are teachers, and for each teacher there are as many ways to approach teaching as there are situations in which to teach. The first axiom for any teacher, especially in a cross-cul-

tural setting, is to adapt your teaching to the context of the students, school and community in which you are working. In other words, build your teaching approach in response to the conditions in front of you, and don't assume that what worked in one situation will work the same in another. While it is useful to have a "bag of tricks" available to get you started, don't assume the bag is complete—continue to develop new approaches through trial-and-error on an on-going basis.

Whenever possible, make use of local community resources (parents, elders, local leaders, etc.), and extend the classroom out into the community, to bring real-world significance to that which you are teaching. To facilitate this, incorporate experientially-oriented projects into your lessons and put students to work performing everyday tasks and providing services in the community (e.g., internships, student-run enterprises, local histories, community needs assessments, etc.). Take students on extended field trips to cultural sites, local offices, businesses and industries. Whether in the classroom or in the field, create a congenial atmosphere that draws students into the activity at hand and allows them to experience learning as a natural everyday activity, rather than a formality confined to the classroom. Natural settings are more likely to foster mutually productive and culturally appropriate communication and interaction patterns between teacher and student than are highly structured and contrived situations created in the confines of the classroom. To the extent that you as a teacher can make yourself accessible to the students, you will be that much more successful in making what you teach accessible to them. This requires much patience and a willingness to risk making mistakes along the way, but the payoff will be greater success with the students in the long run.

How do you determine what has been learned?

The question of what constitutes success is difficult to answer under any educational circumstance, but it is especially complex in cross-cultural situations. Different people can exhibit competence in different ways, and when cultural differences are added to the mix, the ways can multiply dramatically. In addition to determining what it is we want students to learn, there is the task of determining how it will be measured. Not everything we want students to learn lends itself to easy and reliable measurement within the timeframe that schools expect to see results. On top of all this, we have the issue of cultural bias in everything from the instruments we use to the way we use them.

One of the most important considerations in this arena is to recognize that there are multiple forms and ways of displaying intelligence, and therefore, we need to provide multiple avenues through which students can demonstrate their competence. Recent studies indicate that there are at least seven prominent forms of intelligence, with each individual, as well as clusters of people, having strengths in some forms and weaknesses in others. These include potential aptitudes in linguistic, logical-mathematical, spatial, musical, bodily-kinesthetic, interpersonal and intrapersonal intelligence (see *The Unschooled Mind*, by Howard Gardner, 1991). The problem is that schools tend to rely almost exclusively on the first two (linguistic and logical-mathematical) as the basis for measuring academic success, leaving other forms of intelligence largely on the sidelines. While you as a teacher are not in a position to unilaterally revamp the schooling enterprise to more fully incorporate the full range of intelligences, you are in a position to recognize them in your students

and to provide a variety of avenues for them to access what you are teaching. At the same time, you can incorporate some of the more culturally adaptive modes of assessing student performance, such as portfolios, exhibitions, demonstrations and productions. Through these more flexible and responsive approaches to assessment, it is possible to officially recognize the various forms of intelligence and accommodate cultural differences at the same time.

What can you do in a large urban school?

While some of the strategies described above may seem most appropriate for small rural schools with a homogenous cultural population, there are additional ways to make large multicultural urban schools more culturally sensitive as well. One of the most culturally inhibiting factors in urban schools is size and all the impersonal and bureaucratic conditions that go along with a large-scale institution. Some of the negative effects of size can be ameliorated within an urban setting by rethinking the way students (and thus teachers) experience the school and by viewing it more as a community than as an institution. For instance, a large school can be broken down into several smaller "learning communities," or schools-within-a-school. Students and teachers can form clusters that function as a cohesive unit with a support system based on personalized relationships. To overcome the constraints and inefficiencies of a highly compartmentalized schedule, classes can be organized in a block schedule format, where longer periods of time are made available for extended field trips and intensive projects without interfering with other classes. Through such arrangements, the economies-of-scale advantages of a large institution can

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be coupled with the flexibility and human dimensions of a smaller school.

The other area in which a potential problem can be made into an asset in an urban school is the cultural mix of the student population. While it is not possible to fully attend to the particular cultural needs of every student on a daily basis, it is possible to incorporate the rich mix of cultural backgrounds present in the classroom and school into the curriculum in ways that help students learn to understand and appreciate the similarities and differences among themselves. The interests and strengths of each student can be recognized and re-

warded through practices such as peer tutoring, cultural demonstrations, group projects and language comparisons. Over time, students in culturally-mixed schools can learn to treat cultural differences as part of the natural fabric of society, to be celebrated and identified as a strength, rather than as a threat. To this end, teachers in urban schools should be encouraged and supported in their efforts to capitalize on the diversity of cultures present in their classrooms.

Summary

What has been presented in this series of articles is but a sampling of

the strategies that teachers may draw upon to make their classrooms inviting places for students from all cultural backgrounds and persuasions. Teachers must recognize, however, that to stop here and assume you are now ready to take on any teaching situation runs the danger of oversimplification and misapplication of practices that are much more complex than a short review such as this can convey. If you wish to put any of the above to use, you should enter into the task with an open mind and an open heart, recognizing that the journey has just begun and that it will take a lifetime to complete. Happy travels! ♦

Active Reality Research, Part I

by Angayuqaq Oscar Kawagley

During recent times many articles have been produced that address ethical values of doing research in the North. I will not address them except to say that confidentiality is important, that villagers know what they are participating in and that research results be provided to the villagers. It has been too long that Native people have been subjects of research without the honor, respect, reciprocity and cooperation due them. It is now time that we recognize that they are human beings with particular ways of knowing, being, thinking, behaving and doing. They have successfully survived for many thousands of years.

For the Yupiaq people, culture, knowing and living are intricately interrelated. Living in a harsh environment requires a vast array of precise empirical knowledge to survive the many risks due to conditions such as unpredictable weather and marginal food availability. To avoid starvation they must employ a variety of survival strategies, including appropriate storage of foodstuffs that they

can fall back on during the time of need. Their food gathering and storage must be efficient as well as effective. If this were not so, how could they possibly hope to survive? To help them achieve this balance, they have developed an outlook of nature as metaphysic.

The Alaska Native world views and technologies are conducive to living in harmony with the universe.

Their lives, subsistence methods and technology were devised to edify their world view. After all, the Alaska Native creator is the raven. So, how could the human being be superior to the creatures of Mother Earth? How could their hunting and trapping implements be made of offensive materials to animals that they have to kill in order to live? Thus, their tools were fashioned from resources which were not refined, but formed and shaped using the natural materials. Their tools, housing and household utensils had to be with and of nature. Harmony was the key idea behind this practice. They believed all plants, creatures, winds, mountains, rivers, lakes and all things of the earth possessed a spirit, therefore had consciousness and life. Everything was alive and aware, requiring relationships in a respectful way so as not to upset the balance.

The four values of honor, respect, reciprocity and cooperation are conducive to adaptation, survival and

harmony. The Native people honored the integrity of the universe. It is a whole living being. As it is living, all things of the earth must be respected because they also have life. The Native people had the ability to communicate with all things of the universe. This is called reciprocity. From observing nature, the Alaska Native people learned that the earth and the universe are built upon the premise of cooperation. Researchers must implement these four values to advance knowledge and expand consciousness. The constructs and understandings of the Alaska Native people must be honored for their integrity on the level of the modern scientific holographic image.

The holographic image does not lend itself to reductionism nor fragmentation. Reductionism tries to break reality into parts in order to understand the whole without realizing that the parts are merely patterns extant in a total web of relationships. The Native world views do not allow separation of its parts as each part must be understood in its relationships to all other parts of the whole. Respect for the Native people who formalized this view must be practiced. The Native people have transcended the three-dimensional, quantifying and sensory constricted studies of nature practiced by the modern world. It behooves that there be cooperation between the researcher and Native people. The researchers must forget about human superiority to things of the universe and to people considered primitive and backward. The Native people must be treated as equal human beings with powers of observation, critical analysis and a gift of intuition and the magical.

Following are some examples that make the practice of the four values difficult or impossible from the perspective of the modern world for doing research in a Native world.

The tools of mathematics have given us some ideas about patterns

and forms as well as abstract and esoteric formulae that sometimes leave us confused and questioning the use to which they will be put. For example, when will the hunter need to know the exact distance across a river using trigonometric functions? However we agree with a lot of mathematical and scientific theories and concepts, such as the shortest dis-

tance between two points is a straight line; that a circle is a line that keeps falling in toward the center; that the radii in a circle are equal length; that the circle has no beginning and no end; and so forth. These are common sense ideas that indigenous people can readily subscribe to. ◆

Part two of this article will appear in the fall issue of Sharing Our Pathways.

Village Science

by Alan Dick

A moon rock on display has been worn incredibly thin by thousands, perhaps hundreds of thousands of people who needed the experience of touching the rock for it to become real to them.

A display of beautiful wood finishes in Anchorage had a large sign, "Do Not Touch." I had to put my hands in my pockets. The desire to touch the fascinating wood surfaces was too great. The sign was a strong indication that I wasn't alone in my desire to feel the grain under my fingertips.

I wondered why funeral services often include individuals walking by the grave site and gently throwing a handful of dirt on the coffin. It seemed a strange custom until I experienced a few funerals. The ones where we individually put dirt on the coffin were far more real than the ones where we didn't. I realized the importance of handling the dirt. The person's passing became a reality. Denial was impossible.

Handling a worksheet and a pencil are not the same as handling a slimy fish, a jagged rock or feeling the pressure on the rope of a block and tackle.

Sticking a couple of toothpicks into a carrot top and suspending it in

and over a glass of water is hardly hands-on science, but at least there is some physical interaction with the reality of the event.

Touching, handling, feeling and sensing are unmeasurably important to processing science content and concepts. Do we know the difference between physical education and history class? In physical education we are physically active. In history class we read about other peoples' activities.

It is important to learn about the science other people have done as a model for our own experiments and efforts. But that is history! If we want to promote science that stays alive and remains a reality in students' minds and hearts, we must recognize the difference between history and discovery, then honor the student's right to personal explorations and conclusions from touching, handling, feeling and sensing every possible aspect of the science event. ◆

New Pathways to Excellence

The following article won first place in the 1997 Bilingual Multicultural Education Equity Conference student speech contest. Ms. Kuzuguk is from Shishmaref. The bilingual instructor is John Sinnok.

Students who succeed in practicing the arts of their culture are those who have a role model from a member of their family, an outstanding citizen of the community or an inspirational teacher. Just as you make up a part of your family, school and community, they are a part of you. Your ability to become a better part of your family, school and community is limited to your motivation to succeed. With a little encouragement, skills, talents and knowledge can become treasured possessions.

As a member of the community, people develop culture that is shared by the students. From the hunting skills passed on from generation to generation, students are taught how to live off the land. The skills students learn are important to the community because they preserve the culture as well as make the community stronger. By learning the skills from the elders of the community, students develop their own individual ways of doing things. Our cultural beliefs became a very important part of the community and these beliefs go on through the community's history. The key to passing along our culture is in the family. Without our culture people would have a hard time functioning in the community. We live in a community that has a culture of its own. And its own unique way of doing things. Our culture is a source of pride for many families and communities. Every family's cultural heritage is valued.

Whether a student decides to give up or not is his/her choice. And many things affect that choice. Communities are made up of families and neighbors who help each other out. Once a student has been honored for any

achievement, the community does many things to show how proud they are of that student. Once one student achieves excellence, more students are eager to participate.

Students who know family togetherness, community involvement, school participation and their cultural tradition are the ones who will excel in whatever they want to. To find the new pathways to excellence you have to want to look. Don't expect anyone to look for the pathway for you.

Until children are 16 years old, they are forced by the law to go to school. But the next two years of school are optional. And when a student stays in that last two years of school, it indicates that the family and the community have made the student what they are.

What drives students to get up every morning to get to school is their family's encouragement and their own desire to learn. When children do

by Florence B. Kuzuguk

badly in school, the family encourages them to do better. When the community sees a family who doesn't care, the community can guide that family and do its best to help the family out.

The opportunity to achieve excellence is also provided by the school. What you are to become is thought of long before you grow up. Many students in the Native study classes offered throughout their preschool to senior years became great sewers and carvers and are able to speak their language and learn more about their cultural traditions. When you graduate the next thing you want to do is go to a good college or become involved in some program. After that you want to go into a line of work that you enjoy. You make this happen by first graduating from school.

The knowledge and skills you gain transfer to the larger part of the world. In time you will be able to take all that you have learned about where you come from and use it when you are on your own. Within the family you grow and develop and discover the kind of person that you are and that you need and want to be.

Students who know family togetherness, community involvement, school participation and their cultural tradition are the ones who will excel in whatever they want to. To find the new pathways to excellence you have to want to look. Don't expect anyone to look for the pathway for you. You make who you are and who you want to be. Find yourself, and when you look back, you will have achieved excellence. You will also have found new pathways to look forward to. ◆

Welcome Jeannie O'Malley-Keyes!

Jeannie (Creamer) O'Malley-Keyes was born in Fairbanks and grew up with parents, grandparents and six brothers and sisters on a dairy farm outside of Fairbanks that is now a wildlife and migratory waterfowl refuge.

Jeannie is currently a part-time student with the University of Alaska Fairbanks, working towards a degree in sociology and human services technology. She has one daughter, Kirsten O'Malley-Keyes, who graduated from UAF in 1994 and who is now happily teaching in a rural, mountainous area in Japan.

Jeannie brings to the ANKN project many years of experience as an administrator for various Fairbanks organizations and UAF departments. Memorable projects include scheduling local and national visiting per-

forming artists into the local schools and communities, working on Claire Fejes' manuscript, *The Villagers*, being one of the pioneer women to help build the Trans-Alaska Pipeline and initiating and helping bring about the Chena Athabaskan culture and history exhibit at the Creamers' Refuge Visitors' Center.

Jeannie's passions are drawing and painting, hiking, canoeing, cross country skiing, berry picking and gardening.

"We have much to learn from the ways of the Alaska Native people who

lived and survived (and continue to survive) in Alaska" says Jeannie. "If we had listened to them, we wouldn't have houses and buildings sinking into the permafrost, people getting lost, starving and freezing to death in the woods or a radioactive Amchitka. We would know and protect the plants that are good for food and medicines and know better how to survive physically, mentally, emotionally and spiritually on this part of the earth.

I am honored and happy to be a part of the Alaska Native Knowledge Network and am looking forward to learning more about Alaska Native cultures and doing whatever possible to be of assistance to those involved in promoting and preserving the Native ways of knowing. I feel the survival of humanity depends upon it." ♦

Publications Available Through AFN/ANKN



Gwich'in Native Elders
by Shawn Wilson



A Yupiaq Worldview
by A. Oscar Kawagley



The Gospel According to Peter John
by Peter John,
edited by David Krupa



Yuuyaraq: The Way of the Human Being
by Harold Napoleon

To order, photocopy or clip this form below and mail to:

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| | <i>A Yupiaq Worldview</i> | \$ 10.00 | |
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Alaska Students Participate in National AISES Fair

by D.J. & Karen Huddleston

The 10th Annual National American Indian Science and Engineering Fair (AISEF) was held in Albuquerque, New Mexico, April 3–5, 1997. Nine Yup'ik (Eskimo) students from Akiuk Memorial School in Kasigluk, Alaska participated as representatives from Alaska.

These Lower Kuskokwim School District (LKSD) student researchers—the first Alaskans to ever attend an AISEF event—experienced great success. Of the five projects entered, three received medals. Ann Marie Twitchell, representing the research team of A. Twitchell and Alexie Kalila, earned first place honors in the 11th and 12th grade team life science category with the project entitled “Effect Time of Pre-Soak on Germination Rate of Radish Seeds.” The research team of Elena Berlin and Kathleen Evon earned second place honors in the same category with their project entitled “Effect of Salt Concentration in Pre-Soak on the Germination Rate of Legume Seeds.” Earning top honors in the 9th and 10th grade team life science category was the Kasigluk research team of Matthew Brink and Alexie Kalila with their project entitled “Effect of Acid Scarification on the Germination Rate of Seeds with Hard Testa.” Also participating from Akiuk Memorial School were Allison Kassel, Wilson Brink, Victoria Pavilla and Teddy Wassillie.

Over 1,000 students in grades K–12 represented American Indian communities from Alaska, Arizona, Canada, Minnesota, Montana, New Mexico, New York, North Carolina, North Dakota, South Dakota, Utah, Wisconsin and Wyoming during the annual three-day event.

The National American Indian Sci-

ence and Engineering Fair provides a learning experience which promotes academic and cultural enrichment for the student participants. The 1997 fair provided students the chance to meet other American Indian students, learn about each other's projects and interact with professional role models during the project judging. Participants in each grade level and category were honored with scholarships, medals, plaques and other gifts from many prestigious science and engineering organizations including the Bureau of Indian Affairs, Mayo Clinic and the U.S. Department of Energy. Grand prize winners were sponsored to Science Service's 48th Annual International Science and Engineering Fair to be held May 10–16, 1997 in Louisville, Kentucky.

Many tribes, federal agencies, corporations, foundations, universities and schools supported this educational opportunity by funding fair activities and presenting awards. More than 250 scientists, mathematicians, engineers and university students from all over North America attended the fair to judge the student projects. Each science project and researcher is evaluated by and receives feedback from a minimum of three judges.

American Indian Science and Engineering Society (AISES) is a private, nonprofit organization which nurtures building of community by bridging science and technology with



Ann Marie Twitchell poses in front of her teams' first place project.

traditional Native values. The national fair is one of AISES' pre-college education initiatives which supports the advancement of American Indian students in mathematics, science and engineering.

For the Alaska Natives, this year's National Fair was the culmination of a sixteen-day odyssey. These young scientists left their “tundra” homes in Kasigluk on March 21 to compete at the Alaska State Science and Engineering Fair in Anchorage. On March 23, the group flew to Seattle, Washington to begin a two week “overland” trip to Albuquerque that covered the five states of Washington, Montana, Idaho, Utah, Arizona and New Mexico. Kasigluk's AISEF ambassadors were able to experience a multitude of natural and man-made wonders as they traveled the country via mini-van, ferry, bus and train. Walking through the dense temperate rain forest of western Washington, tasting the brackish waters of the Great Salt Lake, estimating the energy potential stored by the awesome Glenn Canyon Dam, hiking the beautifully-colored Bryce Canyon and marveling at the tremendous size of the Grand Canyon are only a few of the wonders these young Yup'ik (Eskimos) were able to experience.

The 1998 National American Indian Science and Engineering Fair will be held April 2–4 in Rapid City, South Dakota. ♦

AISES Corner

(American Indian Science and Engineering Society)

by Claudette Bradley-Kawagley

The AISES summer camp, for students entering grades seven through nine, starts July 14 at the UAF campus for ten days and continues for eleven more days at the Howard Luke Camp, five miles from Fairbanks on the Tanana River. The camp objectives are to:

- Stimulate interest in mathematics, sciences, and engineering among Alaskan Native students.
- Increase student's confidence and knowledge in mathematics and science.
- Prepare students for cultural challenges away from their traditional environment.
- Incorporate Native values with western mathematics and science.
- Encourage parents of students to support the academic pursuits of their children.
- Spend ten days on campus with rural educators and UAF professors.
- Spend eleven days in an Athabascan camp located on the Tanana River just outside of Fairbanks.
- Learn first hand from Native elders with hands-on projects relative to rural survival.

Students will have an opportunity to work on their science fair projects with teachers, scientists and elders employed by the camp. They will have use of the Rasmusen Library and other university facilities and begin their experiments and the collection of data. All projects will be completed by the student either during the camp or in his/her home village. Students will develop their display boards with village teachers during the fall and enter their region science fair to be held November 20–22. The regional science fair will be in Fairbanks for Interior students and in Ambler for Inupiaq students. ♦

AISES Update: Barrow, Alaska

by Carla Willetto

The spring semester has been one of rejuvenation and regrouping for the Ilisagvik chapter of AISES. After a brief hiatus, the chapter has resurfaced and has been busy reshaping itself into a well-received organization. Still few in number, the members have taken several steps in initializing and implementing activities. The initial strategy of the small group is to present a number of interesting activities that would in-

crease the chapter's visibility and attract more members from a student body unaccustomed to participation in student-run organizations.

The Ilisagvik chapter began hosting a lunch-time lecture series which entailed an invited speaker giving a twenty-five to thirty minute presentation on a science or engineering topic. College students and staff, as well as the public, were invited and encouraged. Speakers have included

the North Slope Borough veterinarian who spoke about rabies and a local borough administrator, also an amateur astronomer, who presented information about the comet Hale-Bopp. These lectures were very well attended.

Through the Inupiat Research Institute at Ilisagvik College, one student was able to arrange for the AISES StarLab to be brought to Barrow. The StarLab is a portable planetarium and was shared with the K–12 schools in Barrow where it was a big hit with the students. The chapter was also represented by a student who helped judge the Barrow High School Science Fair in March.

The highlight for several members was the AISES Region I Conference at the University of Alaska Fairbanks. The college was represented by four student members and keynote speaker, Richard Glenn. They thoroughly enjoyed the tours, sessions, Career Expo and fellowship with new friends throughout the conference, as well as the concurrent Festival of Native Arts. They returned to school armed with notes, ideas and souvenirs.

Plans are underway to implement a weekend activity every month that would be open to all Ilisagvik students as well as pre-college AISES students. They also intend to assemble recruitment displays to take to community events to increase AISES visibility and attract more members.

The chapter has been supported and encouraged by various factors of Ilisagvik College—faculty advisors, administration and the Inupiat Research Institute. Support like this is crucial for the success of a young organization and speaks highly of those who support the participation of Native students in science and engineering. ♦

Project Learning Tree

by Susan Rogers

Thank you for the opportunity to introduce Project Learning Tree (PLT), one of the statewide programs in the Alaska Native Science Education Coalition! It's an environmental education program which can be used by teachers or camp leaders for youth in all grade levels. PLT offers a possible forum for integrating Native science and culture with Western science.

This interdisciplinary curriculum introduces tree biology, forest ecology and people's inter-relationship with their environment through hands-on, cooperative activities. Lessons also relate to air, water, soils, pollution, ways of using land and how people interact with parts of the natural and man-made environment. Developing problem-solving skills and creative thinking are emphasized.

The curriculum framework for PLT's education program leads students through awareness to knowledge and concept building with opportunities for action projects.

There are lots of chances for students to use visual arts and to write and talk about the activities while they are doing them.

Many activities are designed to be done outdoors. Students at camp, in 4-H or ecology clubs could use the activities easily. Because the curriculum is used in all fifty states and U.S. territories and six other countries, activities can easily be adapted to a local setting. For example, to give an Alaskan focus to two activities concerning products we use from trees—We All Need Trees and Tree Treasures—examples of Native Alas-

kan tree products such as canoes and paddles, birch-bark baskets, masks and bentwood boxes are included.

Because one of the major themes of PLT is building awareness of diversity of kinds of organisms, points of view and uses of the natural environment, there are examples of Native American culture written into the existing lessons. One activity, The Native Way, focuses on Native attitudes toward the environment and is just right for adaptations from regional education coordinators or other interested people.

Workshops to obtain the material can be set up for an individual school or district in-service, or for any other group in a village. Any community member is welcome to attend the day-long workshop. After some activities are led by the facilitator, participants work in groups to present other lessons. For more information or to schedule a workshop in your area, call the PLT coordinator, Susan Rogers, (907) 269-8481, fax (907) 561-6659 or write to Alaska Division of Forestry, 3601 C Sreet, Suite 1034, Anchorage, Alaska 99503-5937 ◆

Athabascan Region

by Amy Van Hatten

Three exciting developments under the initiative, Sense of Place are taking shape: Project WINGS, AISES Gaalee'ya Spirit Camp and Cultural Geography Camp.

The AISES Gaalee'ya Spirit Camp will be recruiting 42 rural students, six to seven people for each of the following divisions: teachers, Native elders and college students as resident advisors. A contact person from each school district will distribute the applications to interested students. It

is scheduled for July 14 through August 5, 1997. The latter part of the camp coincides with the Fourth Annual Association of Interior Native Educators Conference. It is our hope to have the AISES students show their science project achievements during that time and to be an integral part of

the conference.

Project WINGS has an article following mine. Now that program took off the ground right away. I think it was because of the very interesting components it concentrates on. It has a fall schedule of October 5–19, 1997.

There will be two cultural geography camps in the summer months. The geographic area is the Minto flats with students from Minto. They will be researching place names through talking with their respective elders, parents and other stake holders of the community. Consultation members will be involved with curriculum development on compact disc with a guide book that would contain the

Athabascan and English names for places, land forms, descriptive information for each name, stories and anecdotes from the elders about life and activities in the Minto Flats.

Other Tidbits

Students in Shageluk are interviewing students in New Hampshire on the internet who in turn are sharing with students in Delaware. Shageluk student's Iditarod race updates are a hit in New England.

The most pleasurable time I've spent recently was listening to speakers for the Native history of the Fairbanks area before Creamer's Field days. Speakers were Howard Luke, Robert Charlie, Clara Johnson and Jim Kari. They shared information they've gathered from elders and research on the Chena Athabascan people and their historical contributions before Creamer's Field Dairy Days.

The sponsors of the meeting were the Friends of Creamers. The meeting was also a training session for new volunteers. I think it pleased them very much when Jim Kari said their educational site was the first and only place that used Athabascan translations in identifying places. I will close on this high note. ♦

Project WINGS

by Dee McDonald

Thanks to the many elders who have graciously shown an interest in attending and teaching the WINGS program and to schools and tribal councils throughout the Interior who have pledged their support, agreeing to send students and pay air transportation and registration. A special thank you to the staff at Denakkanaaga for their unfailing support and assistance.

Project WINGS is an educational program for Native high school freshmen and sophomores from villages in



Jeannie O'Malley-Keyes, elder Rita Alexander and Rita Dayton at the Alaska Native Rural Education Consortium held April 23 and 24 in Sitka.

Interior Alaska. The goal of the project is to introduce young people to scientific knowledge and skills related to Fairbanks and their home villages and integrate this with traditional Native values, knowledge and skills so youth may become well informed decision-makers and leaders. After moose season, 12 youth will be invited to fly to Fairbanks to learn the following:

Political Science

How federal, state, and tribal governments work; how political agencies in town make decisions that affect their life in the village; how to write a political resolution.

Health Science

How traditional and Western ways of healing are used to cure and prevent illness. Local elders will be asked to speak about traditional medicines.

Museum Science

How to maintain and preserve cultural artifacts. Elders explain how hunting tools, cooking utensils and other objects were made and used.

Fire Science

How to protect structures in the village from wildfires; fire safety in the home; the effects of fire on moose habitat, small game and berries and how elders used fire to improve local conditions.

Air Science

What elders know about the weather, the moon and the stars; how to use telescopes, build model airplanes and learn what it takes to keep planes flying to and from the villages.

Environmental Science

How to build a water treatment plant; how technology impacts the village environment; solid and hazardous waste management, fish, wildlife and lands.

Youth will visit a local post office, spend a day at a high school in Fairbanks, visit the Alaska Native Language Center and a local radio station. There will be dinners with elders, swimming lessons, talking circles and drum-making. Boy, are we going to be busy! Classes will be taught by Native instructors and elders. A booklet will be produced at the end of the project's first year describing the activities and outlining content areas. This booklet will be sent to schools throughout the Interior, allowing districts the opportunity to award high school credit to students who have completed the program. Your continued support will strengthen the educational quality of this program, and ensure an even better education for the students and leaders of the future. ♦

Aleut Region

by Moses Dirks

The Aleut Region is moving ahead with the implementation of two initiatives for 1997: Elders and Cultural Camps and Reclaiming Tribal Histories/Alaska Native Reawakening Project. The next critical step would be to get all the memorandum of agreement (MOA) partners who will be assisting with the program signed up. The partners for this year's initiative who will be asked to assist will include regional school districts and non-profit Alaska Native organizations.

Thus far we have all but one MOA signed; once that is completed in the Aleut Region, we will proceed with the 1997 initiatives.

Elders and Cultural Camps

Aleutian/Pribilof Islands Area

In the Aleutian/Pribilof Islands area the Alaska Rural Systemic Initiative and the Annenburg Rural Challenge will be working closely with two newly signed MOA partners: the Aleutian/Pribilof Islands Association and the Unalaska School District.

They will assist in the following capacity:

- Identify Alaska Native elders and their specialty and who will be willing to contribute their expertise to educational and scientific endeavors.
- Prepare a half-hour video that will foster the use of cultural camps in a natural setting, especially those related to local cultural traditions and indigenous science practices.
- establish guidelines and some process for the protection of cultural and intellectual property rights of Alaska Native people as they make their traditional knowledge available to others.

The Aleutian/Pribilof Islands Association, Inc. will be hiring a graduate assistant who will assist in the formation of the Aleut Academy of Elders, the Aleut Teachers Association and an Aleut cultural camp in the region.

The Unalaska School District will assist in the development of multimedia curriculum materials and also assist in the formation of a Native teacher association in the region.

Alutiiq Area

Kodiak Island Borough School District will assist in the development of an Academy of Elders, Alutiiq Teacher Association and an Alutiiq Cultural Camp.

The Kodiak Area Native Association has once again hired a graduate assistant. She will be assisting in the development of the Alutiiq Academy of Elders and the Alutiiq Cultural Camp on Kodiak Island.

Reclaiming Tribal Histories/Alaska Native Reawakening

Aleutian/Pribilof Area

The Aleut Region will implement a new initiative connected to language



Sabrina Sutton, graduate assistant, is an MOA partner from Kodiak Area Native Association working on the Elders and Cultural Camps initiative.

arts or social studies. The initiative is entitled "Reclaiming Tribal Histories/Alaska Native Reawakening Project." The participants in the Alutiiq/Aleut Region will consist of the following:

- Alaska Rural Systemic Initiative: Moses Dirks will assist Harold Napoleon in the development and implementation of the Alaska Native Reawakening Project/Reclaiming Tribal Histories.
- Alaska Federation of Natives: Harold Napoleon will be coordinating the project.
- Unalaska Public School: Students and teachers will be actively involved in the implementation of the Alaska Native Reawakening Project/Reclaiming Tribal Histories.

Alutiiq Area

The Alaska Rural Systemic Initiative and the Alaska Federation of Natives will be doing the same thing as

the Aleutian/Pribilof area with their initiatives.

Harold Napoleon of AFN will be the coordinator of the Alaska Native

Reawakening Project.

- Kodiak Island Borough School District: Students and teachers will be actively involved in the implemen-

tation of the Alaska Native Reawakening Project.

- Alutiiq Community: One community from the Alutiiq Region to participate in the Alaska Native Reawakening Project/Reclaiming Tribal Histories.

Lastly, the Aleut Region is closing out on its first initiative: Indigenous Science Knowledge Base. We are waiting for a few more signed release forms from the elders.

If you have any questions concerning Annenberg Rural Challenge or the Alaska Rural Systemic Initiative, please call Moses Dirks or Harold Napoleon at (907) 274-3611. ◆

Tatitlek Students Work with Smithsonian on Alutiiq CD-ROM

by Dr. Aron L. Crowell, Director
Arctic Studies Center, Alaska Region Office

Through a project carried out last spring by the Smithsonian Institution's Arctic Studies Center (Anchorage) and the Chugach School District, students at Tatitlek Community School explored their culture, learned new computer skills and produced an interactive computer program that features color photographs, Sugcestun language terms and information about a variety of objects made by the Alutiiq people.

To create the HyperStudio program, high school students Kelly Kompkoff, Jo-Ann Vlasoff, Jason Totemoff and Marcia Totemoff first talked with elders in the community and studied extensive documentary materials prepared by Arctic Studies Center researcher Dee Hunt. With the guidance of teacher Dennis Moore and Chugach School District consultant Mel Henning, they then scanned in photographs, prepared texts, and programmed a computerized "exhibit" that lets viewers learn about masks, clothing and other beautiful and interesting museum pieces that were made in Prince William Sound, Kodiak Island and the Alaska Peninsula more than a century ago. The 20 objects studied by the Tatitlek students now reside at the National Museum of Natural History in Washington, D.C., but will be coming to Alaska in 1999 as part of a traveling exhibition called *Looking Both Ways: History, Culture, and Identity of the*

Alutiiq People. The exhibition is being planned by the Arctic Studies Center in partnership with the Alutiiq Museum and Native organizations throughout the Alutiiq region.

The Tatitlek project was fun, exciting and interesting for the four students, and gave them a chance to learn more about what goes into the production of multimedia for computers. In accordance with the Arctic Studies Center's educational and research mission, I am interested in working with the Rural Systemic Initiative and individual school districts to consider similar projects elsewhere in Alaska. In addition, a much larger educational CD-ROM, which will include more than 250 Alutiiq, Yup'ik and Dena'ina objects purchased by Smithsonian collector William Fisher between 1879-1894, is currently under development at the Arctic Studies Center in Anchorage and will be available within two years for nonprofit distribution to schools, cultural centers, museums and libraries.

Chugach School District assistant superintendent Rich DeLorenzo, who has presented the Tatitlek project at statewide educational meetings, supported the program as a way to help village students connect not only with their cultural traditions, but with the fast-changing world of computer technology. In-kind support from Mark Standley at Apple Computer is gratefully acknowledged. ◆

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Inupiaq Region

by Elmer Jackson

In *Sharing Our Pathways* Vol. 2, Iss. 1, I reported on the memorandum of agreements between the Alaska Federation of Natives (AFN) and four school districts, Ilisagvik College and Kawerak, Inc. This report will have information on the goals and benchmarks on this year's initiative: Native Ways of Knowing and Teaching. Three school districts, Native corporations, tribal organizations and other organizations will work together to develop a culturally-based curriculum for teachers in the classroom. Many Inupiaq teachers create lesson plans; they are the experts in curriculum development. This new curriculum will be based on the Alaska Native Land Claims Settlement Act (ANCSA) and the subsistence economy.

Goals for Native Ways of Knowing

- To incorporate Alaska Native ways of knowing into the pedagogical practice (teaching methods) of schools in rural Alaska in such a way that knowledge can be drawn from the local culture and physical environment.
- To identify strengths that Alaska Native teachers and parents bring to their teaching and to create an educational environment that capitalizes on those strengths.
- To integrate appropriate Alaska Native pedagogical practices into the pre-service and in-service preparation of teachers for rural schools.

Benchmarks: (Year 1)

- All teachers have integrated some form of experiential learning activity into their planning each week.
- All participating school districts have reviewed their teacher evaluation procedures, taking into ac-

count local culture variations in successful teaching practices.

- All schools report a significant increase in parent interest and involvement in school activities, including a ten percent increase in attendance at parent-teacher conferences.
- Native student enrollment in teacher education programs has increased by ten percent.
- The proportion of time in in-service programs devoted to cultural issues associated with teaching has increased by twenty percent.

ANCSA and the Subsistence Economy

The North Slope Borough School District, Northwest Arctic Borough School District and the Bering Strait School Districts' goals and benchmarks for ANCSA and the subsistence economy are:

- To achieve a balanced and thorough treatment of the role of cash-based and subsistence economies in rural communities through a

comprehensive and culturally-aligned curriculum design adaptable to local circumstances.

- To develop a curriculum structure that takes into consideration the context in which learning occurs and makes use of local resources.
- To form a coalition of organizations associated with resource management and related economic issues to coordinate curriculum resources and technical support for rural schools.

Benchmarks: (Year 1)

- Each participating school district has an articulated curriculum design that integrates the study of issues associated with ANCSA corporations and the subsistence economy and lifestyle.
- Students in all participating districts are actively engaged in activities associated with the everyday life of the community.
- A coalition of organizations and resources have been drawn together in each region to provide curricular support for rural schools in teaching ANCSA and the subsistence-related issues.

The following organizations will participate in the implementation of the goals and benchmarks: the Alaska Rural Systemic Initiative, the Alaska Native regional and village corporations, the Indigenous Peoples Council for Marine Mammals, the Inuit Circumpolar Conference, the Eskimo Whaling/Walrus Commissions, the Native American Fish and Wildlife Society, the Alaska Natural Resources and Outdoor Education Association, the Alaska Society for Technology in Education, the Alaska Association of Economics Education, the Alaska Association of Social Studies Teachers, tribal colleges, school districts and the rural campuses. "The Inupiaq region will also serve as the initiator for the first of a rotating annual meeting of representatives from all resources, technology and economics education-



Charles Kingsland and Elmer Jackson at the ANREC meeting in Sitka April 23 and 24, 1997.

related professional organizations throughout the state, to promote the incorporation of ANCSA and subsistence-oriented issues in school curricula in culturally appropriate ways.”

The North Slope Borough School District, Northwest Arctic Borough School District and the Bering Strait School District will hold subsistence curriculum development workshops. If everyone works together, the tasks will be easier to accomplish. I will keep you updated on planning meetings and other events. ◆

Noatak Science

by Deborah Webber-Werle

“The Northern Lights are as cool as Superman,” said Kenneth Downey, first grader in Noatak, Alaska after Kathy Bertram from the Geophysical Institute recently visited his class as part of the Alaska RSI Scientist-in-Residence program. Ms. Bertram spent several days working with K–12 students at Napaaqtugmiut School. In addition to an excellent slide show presentation about the aurora, students watched videotaped launches of research rockets from Poker Flats Rocket Range near Fairbanks, Alaska. The next day, students made model rockets of their own that they launched outside the school.

Junior and senior high school students were awed by aurora photographs taken from the space shuttle

Challenger. “Many high school students don’t know about the research being done at the Geophysical Institute,” said Ms. Bertram. “This information is so new that it isn’t even in their textbooks yet.”

“I think the students learned that science is happening today,” said Stan Van Amberg, junior high and senior high school science teacher. “It was great

that the science was from their own element. These kids see Northern Lights all the time.” Mr. Van Amberg also thought the students were impressed by the information about the Sprites and Jets, a new form of colored lightning that shoots upward from some thunderstorms. This phenomena was recently discovered by researchers at the Geophysical Institute.

The Scientist-in-Residence program promotes student interest in science by bringing working scientists into the classroom. ◆

Bering Strait Region: Our Vision for the 21st Century

by Bernadette Alvanna-Stimpfle

activities inherent to the communities into the basic curriculum and

- to encourage parent involvement and to begin work on implementing a Native language immersion program.

On the afternoon of April 4, Esther Ilutsik, Ciulistet Native educator from Dillingham and Henry Alakayak, Ciulistet elder consultant from Manokotak gave a great presentation on the beginnings of the Ciulistet Research Group (CRG) (see *Sharing Our Pathways*, Vol 1, Iss. 2). Esther demonstrated some of the educational materials that were developed by CRG that stem from traditional Yup’ik knowledge base rather than translating Western educational materials for use in the classroom.

On the last day we made a list of possible names for our group and decided on “Kii” Educators Association (KEA) which means “go” in Inupiaq and the acronym shows the “KEY” to Native education. However, it is only a temporary name. I will be sending another list of names for the Native educators and participants to choose from and keep everyone updated on our progress. ◆

Part of my job as a Native Ways of Knowing coordinator with the Alaska RSI is to help form a Native educators’ association in the Bering Strait Region. I see this as an opportunity to become a group with common interests to help better the education of our Native students. We as Native educators are the VOICE for Native students learning and for developing culturally relevant teaching materials. We also need to support each other as professional people.

A group of Bering Strait School District and Nome City Schools teachers met on April 3–5 to discuss the formation of an association and to make recommendations to focus on. A large part of each day was spent on brainstorming recommendations. The recommendations focused on the imbalances in the educational system and were made to begin to address solutions to the imbalances. Some of the recommendations were:

- to begin to make aware to the general public, governing bodies and employees of school districts of the imbalances that exist within the school and communities;
- to design integrated cultural ac-

Yup'ik Region

by Barbara Liu

This is an update of the regional meeting on February 24 and 25, 1997. The memorandum of agreement (MOA) representatives were Charles Kashatok, William Beans, Natalia Leuhmann, Mike and Cecilia Martz, Maryann Lomack and ANKN staff Lolly Carpluk. The elder representatives were Elena Nick, Billy McCann, Cecelia Beans, Justina Mike, Louise Tall and Elizabeth Peter. Representatives from Chevak, Dillingham, Manokotak and Iliamna were unable to attend due to the inclement weather.

The elders conveyed their formal schooling experiences. We learned through them that there were many interesting aspects of the school. The most significant parts of territorial schooling were that the teachers were bilingual in Yup'ik and English and taught in both languages for a period of time. The students were around puberty age. Prior to attending school, the language skills, traditional values and customs were taught by parents and elders. Despite the lack of formal education in science and math, the parents and elders inherited the role

as teachers in teaching their children through events in their daily life. This home teaching environment continued to nourish until the development of schools. The elders who did not attend this year's Bilingual Multicultural Education Conference relived their traditions in parenting by the speech of elder Clarence Irrigoo. The emphasis given by Mr. Irrigoo was that parenting should begin before children reach puberty age. The elders also voiced their recommendations in working together on the cultural and intellectual property rights



Greg Anelon, Mary Ann Lomack and Barbara Liu at the recent ANREC meeting in Sitka.

issue. Unfortunately, the coordination of the regional MOA activities were not discussed due to time constraints.

I hosted two additional teleconferences since the February meeting to address the coordination of regional MOA activities. MOA representatives were all invited to join the teleconferences and the outcomes were positive. A curriculum planning meeting took place in conjunction with the Department of Education initiative in the first week of May in Dillingham. *Quyana.* ♦

Yup'ik Immersion: A Student Perspective

by Danielle Dizon

The following speech placed first in the Academic Pentathlon Speech Scholastic Division sponsored by Lower Kuskokwim School District on March 10, 1997. The speech was given by eighth grader, Danielle Dizon of Bethel, Alaska. Danielle is the daughter of Barbara Liu, Yup'ik regional coordinator.

The Yup'ik Immersion program began here in Bethel two years ago. The planning started nearly eight to nine years before the program began. The plans started with parents, community members and teachers who were interested in offering something more than what the regular program offered which was 30 minutes a day in Yup'ik for elementary students and 50 minutes a day optional for high school students.

Last summer, I attended a World Indigenous Peoples Conference in Albuquerque, New Mexico. A workshop I attended was "The Evolvement of Maori Education in a Predominantly White School." The presenter was Mihi Roberts, principal for the Forest Lake School in Hamilton, New Zealand. It took them 14 years of planning to reach long-term development plan for Forest Lake School which now offers enrichment, partial im-

mersion and total immersion in the Maori language and culture. Their total immersion program now owns their own property, personnel and curriculum. The community helped renovate a building that they now use. The personnel are all Maori speaking from their principal, teachers, janitor, cook and resource people. Their resource people work right in the school developing their teaching curriculum. The philosophy of their

school is based on *Te Wheke Waiora*, which embodies total well-being.

For the past eight years attending all three Bethel schools, I have taken Yup'ik classes taught by our full-speaking Yup'ik teachers 30–50 minutes per class day. The basic words I learned in Yup'ik are *Waqaa, Camai, Cangacit, Assirtua and Piuraa*. I was taught these same words every single year. Besides these, I have learned numbers up to 10 and basic commands such as stand-up and sit-down.

My brother who attends kinder-

garten at the Yup'ik Immersion school since August of 1996 knows more Yup'ik now than I've learned in school the past eight years. He continues to learn our Yup'ik language. I think the Yup'ik Immersion program is working and is doing a great job, so far.

I also think the school needs to have 100% Yup'ik speaking faculty like principals, teachers, janitors, cooks, etc; more hands-on curriculum like going and exploring our land, maybe going on a ice-fishing field trip for the older ones, go and sight-see

our land animals and birds such as the ptarmigan in Bethel. By doing that we would be doing more hands-on things instead of just seeing it on paper.

It took the Yup'ik Immersion program almost a decade to get going in Bethel. It has been a positive change for Bethel's young students. I think it may take a decade to make our program 100% Yup'ik but if we put our heads together and start planning toward it, it could happen. ♦

Southeast Region

by Andy Hope

The Alaska Native Rural Education Consortium (ANREC) met April 23–24 in Sitka. The Southeast Alaska Native Educators Association (SEANEA) met April 23 in Sitka.

The first day of the ANREC meeting featured presentations by Southeast Region partners with panel discussions on implementing standards/assessment in rural Alaska schools and developing the Tlingit Sea Week handbook.

I traveled to Hoonah and Angoon on April 22 with representatives from the National Science Foundation and Ray Barnhardt, one of our co-directors. Chatham School District (headquartered in Angoon) is in its second year as an ANREC partner. Hoonah School District recently signed on as a partner.

In early April I coordinated teleconferences to develop plans for implementing the Cultural Atlas initiative. This initiative will involve developing compact discs for use by the partner districts in our region. It is likely that the participants will draw upon

the recently completed Tlingit Math Book/Curriculum Guide and the Tlingit Place Name project for source material. The Tlingit Place Name project is being administered by the Southeast Native Subsistence Commission. See my report in *Sharing Our Pathways* Vol. 2, Iss. 1 for information on the Tlingit Math Book.

Jimmy George, Jr. has been hired to coordinate the Cultural Atlas project. Jimmy is a member of the Raven moiety Deisheetaan clan of Angoon. He is currently working at the University of Alaska Southeast Auke Bay campus. Mary Larson of the University of Alaska Fairbanks Oral History Library will be providing technical assistance to Jimmy and the participating districts for the Cultural Atlas project. Mary presented a training session in Sitka April 24–26, with two representatives from each par-



Lydia George speaks at the recent ANREC meeting in Sitka.

ticipating school expected (Hoonah, Angoon, Klukwan and Sitka).

I would like to thank Della Cheney of Sheldon Jackson College for her recent contributions to our project. Della has provided organizational support for the ANREC and SEANEA meetings and the cultural atlas training.

I am in the process of helping plan the start-up of other initiatives in our region, particularly the Axe Handle Academy and the Alaska Native History Text. More on these initiatives in the next issue. ♦

My Sitsu (Grandmother)

by Judith F. Evans

Even as I write, this computer does not have Athabaskan in its directory. For spelling it says “no suggestions.” Somehow this makes me sad and things surface in my mind.

The people—what does that mean in today’s world? I want to write my memories and beliefs as I feel with an Athabaskan heart—young, strong and proud. At times I really wish I could go back to that house by the creek that gently flows by and whispers secrets that no one can understand but the woman that lived in the house—my grandmother, Kitty Evans. I write these words to share my memories and give as a gift to the youth and my brothers Paul Jr. and Robert Evans. I want people to know how great my grandmother was and will always be.

Someday I wonder when we ourselves will be looking through books to find our identity that was lost as we said our good-byes to our passing elders and buried their knowledge and tradition with them.

I weep for each one and everything that they were and represent to

If only I would have learned or listened a little harder, been more attentive and put away all those modern ideals that engrossed my mind at the time and reached for what was in front of me all along . . .

me as a young Athabaskan woman struggling to find my place in this modern world. I remember the times I spent back at my Grammy’s house as a child, from the feel of her skin to the strength of her hands, the way she gently scolded, burnt bacon, her closets cluttered with everything from plastic bags to bolts of cloth (which my sister and I explored in child-like wonder), to the time she called me, *Bee Sne E whoa* which means “we tell her but she never listens.” My name from grandmother—it means more to

me than I can express in words. Just feel what I feel and maybe you will get a glimpse of where I come from.

My grandmother never let me down; her heart never quit giving and still gives even though she is in another place. I feel it everyday; I see it in some of the things I do. I feel her love as I walk outside and look around and see the Yukon River and the land that shaped and put forth the necessities for my grandmother to forge her life as an Athabaskan elder. As I am older, when I think back and I see my grandmother’s eyes staring at me, I see in those eyes all the knowledge that I wish I could have known.

If only, if only, if only . . . but that does not take away the regret I have in my heart. If only I would have learned or listened a little harder, been more attentive and put away all those modern ideals that engrossed my mind at the time and reached for what was in front of me all along.

No money, no college, no one can bring her or what she had to teach me back or change my regret. But what I do have are the memories that I am blessed with and I carry them with me everywhere I go.

Appreciate and utilize the time you have with your elders. ♦

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