INTRODUCTION

The National Science Foundation (NSF) Directorate for Education and Human Resources (EHR) sponsored a two-day workshop to discuss issues of culturally responsive educational evaluation as they pertain to Native Americans on April 25-26, 2002, at the Holiday Inn in Arlington, Virginia. Invited participants included 20 evaluation and education experts with a variety of tribal affiliations and experience in federal agencies, national organizations, universities and schools across the United States (see participant biographies in Appendix C).

For the last decade, NSF has been concerned with increasing the capacity of the field to provide high quality evaluation services. In June 2000, NSF held a workshop to discuss issues related to increasing the supply of minority evaluators for mathematics and science programs and projects. With this workshop, NSF continued this dialogue aimed at describing the extent of the problem, developing a network to identify and share information about available resource materials, compiling lists of Native American evaluation professionals and identifying training and educational opportunities.

The NSF Assistant Director for EHR, and senior staff from the Division of Research, Evaluation and Communication, and the Division of Educational System Reform delivered opening remarks and framed the meeting's purpose. A Native American Elder also welcomed the workshop participants. Two invited paper sessions and one breakout group session followed, organized around three major themes:

- Evaluation issues relating to the academic achievement of Native American students;
- Education/training opportunities for Native American evaluators; and
- Developing, maintaining and expanding a network of Native American evaluators.

The goal of the workshop was to offer direction for future planning of evaluations and research activities, and to focus on capacity building within the field of educational evaluation. This report presents four invited workshop papers, two reports from the session discussants and three breakout group reports. Appendices include the workshop agenda, a list of participants and participant biographies.

OPENING SESSION

Presiding

Elmima C. Johnson
Senior Staff Associate
Division of Research, Evaluation and Communication (REC)
Directorate for Education and Human Resources (EHR)
National Science Foundation (NSF)

Anselm G. Davis
Program Director
Rural Systemic Initiative Program
Division of Educational System Reform
EHR/NSF

Welcome

Elmima Johnson

We are very honored to have with us today this very impressive group of nationally known Native American educators and evaluators to help us explore issues surrounding the cultural context of educational evaluation. As you know, this workshop is a continuation of several meetings focused on capacity building that began more than two years ago. In those meetings we asked various groups to discuss with us their issues and concerns regarding educational evaluation. This is a follow-on meeting, exploring these issues from a Native American perspective.

To place this meeting in context, let's look at the actions that led NSF to initiate this series of meetings:

1) Federal agencies were required by regulation to report on the outcomes of funded activities. That is, the Congress decided to ask what we were doing with our appropriations. In a sense they legislated accountability, asking all federal agencies, including NSF, to look at the results of their actions. In doing that, NSF discovered that there were only a small number of evaluators available to help us assess our efforts. Moreover, there were even fewer professional evaluators from under-represented and minority groups.
2) Another impetus for those meetings was the national concern that our educational system continues to fail for large portions of our population. Thus we need to evaluate our efforts and find out how we can change that, so that the No Child Left Behind Act at the Department of Education will work.

We want to emphasize that we are here for your advice and counsel. We are here to listen and to learn. We encourage you to share openly and honestly with us your experience and expertise, and in turn, we promise you that we will utilize what you say to help guide our future evaluation capacity building activities.

I am going to turn the meeting over to my very able co-host, Dr. Anselm Davis, Program Director with the NSF Rural Systemic Initiative. For those few of you who don't know him, he has a Ph.D. in educational administration from Pennsylvania State University. He began his career at the Bureau of Indian Affairs as a teacher, then became an educational specialist. He has served as a Superintendent of Schools in Window Rock, Arizona. He was appointed a Congressional Fellow.

He has been a Principal Investigator with the Navajo Nation Systemic Initiative. Then he returned to Washington to the Bureau of Indian Affairs. We are fortunate that we can share his expertise during his tenure in Washington.

There is another accomplishment that is not on his resume. Dr. Davis is an artist. We have a magnificent piece of his work with us that I'm going to bring to the meeting later so that you can see it.

Anselm Davis

Thank you. As stated in your introduction, I have certainly done a few things in my professional life in addition to being an artist and a singer of songs. I've ridden the white horse of success in my professional life and I have also been shot off that white horse a time or two during my professional career. I've been in the field of education, it seems, all of my life as a K-12 student, as a college student, as a teacher and then as an administrator in both the Bureau of Indian Affairs and public school systems. Throughout this time, I've been concerned about the education of our Native American children. Having the opportunity to come here to Washington, DC, with NSF, is exciting because I find myself in a position to be of service to others who are striving to make a difference in the educational lives of our Native American children.

I was excited when I was asked by Dr. Johnson to work with her in putting on this particular workshop because it brought the Rural Systemic Initiative and the Evaluation Division together to discuss important issues of evaluation and to determine who needed to be here. I was aware that two years ago, back in June 2000, NSF brought together a group of minorities for a session such as this. But, again, Native Americans fell through the cracks. In that group of people there was only one Native American individual who provided input on the issues of evaluation from a Native American perspective. I was really excited by NSF's willingness to bring just Native Americans together in order for us to talk about the issues of evaluation from our perspective and then lay things on the table in terms of what needs to be done and where we go from here. I don't see this as a one-shot workshop. Hopefully, the recommendations that come out of this workshop will lead us to other activities.

I brought an elder with me. Harry McCabe is a colleague, a friend and a fellow elder. I've asked him to be here this morning with us. He comes from Dennehotso, Arizona, and is working here in the DC area. I've asked him to set the stage spiritually for us as we talk about some very important issues and to get us started on a very good day.

Harry McCabe
Elder

Ya' at'eeh! That means "hello" in Navajo. My name is Harry McCabe. I am a member of the Navajo Nation. I am born for the *Na-kai-dine-ee* clan and born to the *Toh-di-chiini* clan. My paternal grandfathers are *Tsi-na-giinii* and *Na-kai-llpahii.* I've always kept up my spirituality at home and at work. I worked for Phillips Petroleum for 31 years as a designer and illustrator. Their headquarters are in Oklahoma where I worked until Phillips Petroleum realized that it was cheaper to contract with designers. So after that I went back to Arizona and worked as a self-promotions consultant for a number of the tribal organizations. I was driving 50,000 miles a year and traveling all over the country and couldn't carry on a relationship with anybody. I met a woman who lives in this area so I ended up out here. That's the reason I'm here. Now I'd like to say just a little prayer in Navajo to begin this workshop.

[The prayer in Navajo asked for wisdom and the strength to help us discuss the issues at hand with clarity of meaning and purpose. The prayer ended with a reminder that as we begin this workshop beauty is all around us.]

Anselm Davis

I am half Navajo and half Choctaw. So for my Navajo friends who are here, I say "*Ya' at'eeh.*" To my Choctaw friend sitting across the way, "*Ha da lito,*" and good morning to everyone else.

This morning we have with us Dr. Conrad Katzenmeyer and I have the pleasure of introducing him. He is a colleague from the Division of Research, Evaluation and Communication at NSF. As the Senior Director for Evaluation in the Division, he has a varied set of responsibilities. He is the Contracting Office's Technical Representative for most of the Evaluation Program's contracts. He also serves as a Program Director for over a dozen evaluation and monitoring task orders as well as six grants. Dr. Katzenmeyer further serves as evaluation consultant to other parts of NSF and has prepared evaluation plans on request. He joined the NSF staff in January 1993, but he has been working with various types of evaluation activities for about 30 years. Let's welcome Mr. Evaluation!

Remarks

Conrad Katzenmeyer
Senior Program Director
REC/EHR/NSF

The Evaluation Program within the Division of Research, Evaluation and Communication began in 1992. I want to say just a few things about what the Evaluation Program is and what we've been doing with respect to building capacity in evaluation, which has been a theme in the Evaluation Program almost from the beginning.

The purpose of the Evaluation Program, in general, is to conduct evaluations of the 30 or so programs within Education and Human Resources, with a few others added in at times. We work under a Congressional mandate to evaluate all of our programs systematically. This has led to a large number of studies; I will mention just three of these evaluations.

Briefly, we did a study of the Young Scholars program that operated within the Directorate for a number of years. This was a small program, and our study concentrated on comparing later attainments of Young Scholar participants versus a comparable group of students who had not been in the Young Scholar Program. As a second example, we carried out a study with a particular emphasis on evaluating dissemination and implementation of the Instructional Materials Development (IMD) Program. This is one of our larger EHR programs. We did an evaluation of the Statewide Systemic Initiatives, which was the largest evaluation we have run, to date.

As our contractors conducted these evaluations, it became apparent that in order to have good information available to them from NSF-funded projects, we were going to have to provide help to Principal Investigators, to their evaluators, and to our own staff who weren't necessarily all that familiar with evaluation. Remember, this was ten years ago when evaluation wasn't the requirement in NSF that it is now.

Our first effort was *The User-Friendly Handbook for Project Evaluation,* published in 1993. It was followed in 1997 by *The User-Friendly Handbook for Mixed Methods Evaluation* that took a more qualitative approach than the original. A new edition has just been published that combines the two previous *Handbooks* and contains additional material on the cultural context of evaluation. All three *Handbooks* were developed by Westat. We distributed about 20,000 copies of the original *User-Friendly Handbooks* and we started with a print run of 10,000 for the new *Handbook*.

In addition, it was necessary to provide some training using the *Handbooks*. We had Westat run workshops for our PI's, evaluators and staff. These were very popular. We plan to be supporting additional workshops focused around the new *User-Friendly Handbook*.

That is how we got started, both in making materials available and in doing the training to help the field. But we recognized that we needed to provide other types of assistance, as well. As one example, we knew we needed to support other kinds of training opportunities. Although the workshops for *The User-Friendly Handbooks* were successful, they only took a day and a half. So they could provide nothing more than awareness about evaluation. Hence, we have supported several other training activities. One is summer institutes run by The Evaluation Center at Western Michigan University. These provide about a month-long intense experience for evaluators and aspiring evaluators. About half of the participants go on to internships during the next year in our Advanced Technological Education Program. The Evaluation Center has just conducted the 5th annual summer institute; there have been approximately 100 participants over this time. We also made a connection with the American Educational Research Association to oversee a program for the preparation of Ph.D.s in evaluation with a math/science focus. Projects were supported at Lesley College, Utah State University, the University of California-Berkeley and the University of Minnesota. These projects are now ending, and this has been a very successful program. It has turned out about 25 Ph.D.s in evaluation and has had a marked impact on the field. We are very pleased about both of these training opportunities.

In addition, we developed other materials. One is a publication called *Footprints: Strategies for Nontraditional Program Evaluation.* This was based on a conference designed to explore other approaches to evaluation that might have particular relevance to our research programs. And we had SRI International develop the On-Line Evaluation Resource Library (OERL). This is a web-based system that contains instruments, evaluation plans and evaluation reports drawn primarily from NSF-funded projects. It is on the web and is available for people to search, to borrow from, or to adapt if they want. Through OERL, anyone can take advantage of previous NSF work, and just explore alternatives if that is what they wish to do. I encourage you to take a look at it on the web at www.oerl.sri.org. I think that you will find it of interest.

About two years ago, after having encouraged these activities over a period of years, we held two conferences to sum up and reflect on what we had done. The first of these dealt with the training activities that I just summarized, and focused on how we might take advantage of what we already know and where we might go in the future. The second, organized by Elmima Johnson, dealt with the cultural context of educational evaluation, and is the direct forerunner of this conference today. In the initial conference, participants talked about how to build the cultural context of evaluation into our efforts and those of others, and how to encourage the development of minority evaluators. It was a very successful conference with many suggestions on how to move forward on this. And we have been following the recommendations that we received from both workshops to implement programs for capacity building in evaluation.

Let me end by telling you a few of the things that we are now doing. We are continuing, as I mentioned, the training activities at Western Michigan University, and we will be doing more training around the *User-Friendly Handbook*. We are now developing an evaluation website that will be designed to assist people with an interest in NSF and NSF's evaluations, or our PI's and evaluators who are looking for help in evaluation. We'll include things such as: "How does NSF think about evaluation?" And also, "What resources are available, both from us and from others?" Many materials have been developed or are now being developed and this will provide for one-stop shopping for these evaluation resources. We'll have a lot of other things, including, I hope, websites for some things that will come from this group. We are also exploring how we can provide technical assistance in evaluation. We in the Evaluation Program are not a big group and technical assistance is a very big question, but we feel we need to provide some technical assistance directly. All of the other aids are helpful, and the training is helpful, but at times we need also to give direct technical assistance.

Finally, let me mention something going on right now. For the first time, the Evaluation Program has published an evaluation solicitation via which we expect to award a significant number of grants dealing with capacity building. It is a small effort, only $3 million, and we don't expect that we will be able to make more than 5 to 10 awards, but it is a start in what we hope is a means to reach out to the field and to meet the field's needs as well as our own. So, that's what we are doing and we hope that we have a chance to work with you.

It is my pleasure to introduce Dr. Judith Ramaley, the Assistant Director for the Directorate for Education and Human Resources. (For those who work in Education and Human Resources, she's the boss!) Dr. Ramaley has been with us not quite a year. She came from the Presidency of the University of Vermont and, previous to that, she had been the President of Portland State University in Portland, Oregon. She has had a long and distinguished career in academia, and has had a number of positions in research in academia and in industry over that period of time. Among her many accomplishments, she has been very active in the pursuit and establishment of successful partnerships between higher education, the K-12 schools and industry. It isn't surprising that she took a very active personal interest and leadership role in the development of the Math and Science Partnership Program, which is conducting its first competition in the 2002 fiscal year. She has also been very active on issues of the scientific workforce and school-to-work.

Greeting

Judith Ramaley
Assistant Director
EHR/NSF

There are a couple of issues that I would like to discuss with you that pick up where Conrad Katzenmeyer ended. The first important point is that we are very aware that nationally we must think differently about accountability. We need to reinterpret accountability to mean not only measuring outcomes but creating the capacity to continue to develop and improve a program once it is launched. To do this we need a new approach that links together research, evaluation, and consultancy. We are experimenting with some of this within NSF itself. For example, we are reexamining the way in which we can articulate the underlying ideas and principles that guide our own approach to our programs and how we can write our solicitations to draw attention to some of the key issues that people like yourselves can articulate to us, and have advised us to pay attention to. This workshop is very important to us.

The second point is that we are very much interested in creating new capacity within the evaluation field. We have tried to do this through the Division of Research, Evaluation and Communication, through work with the Department of Education and the National Institutes of Health, and through activities such as this workshop that bring together people to share their knowledge and strengthen the field. The most recent example is the Math and Science Partnership Program. We made special efforts in the way we designed it and in the way we are trying to reach out to different communities to include a rich and meaningful cultural context in educational strategies for science and mathematics. I have a list of some of the ways we are trying to reach out to Native American communities. First of all, the program solicitation encourages tribal colleges to participate in one of these partnerships, all of which are designed to bring higher education, K-12 and the community together in various ways that will encourage a success for every child in science and math from PreK through completion of high school. We use the language: “PreK-12 local, tribal, regional or state educational system.”

We have developed a number of outreach efforts to engage Native Americans. One of them was our Rural Systemic Initiative meeting in February 2002. Another was the American Indian Higher Education Consortium (AIHEC) National meeting, which was also in February. We had two national workshops that occurred about a month later, and we had some participation by representatives from tribal colleges. We received 380 letters of intent, about 15 of which included a tribal college or university and/or a PreK-12 tribal institution.

We have been actively working to get representatives of tribal colleges on review panels. I hope that you will take this very seriously. Please let Anselm Davis know of people that you believe should be on those review panels so that we have the benefit of their expertise.

The “Dear Colleague letter” is what I particularly want to draw to your attention. We are doing something a little different in this Math and Science Partnership Program, which is aligned with the No Child Left Behind policy document promulgated by the transition team that prepared the way for President Bush to take office. What we want to do is to create a very different intellectual support for the individuals involved in mathematics and science education, and also to create capacity for those sites to work with each other. We want to share ideas and experiences, provide very important support at certain moments when only a few can really understand what you are going through, and to develop answers to the “now what do I do?” question that comes up from

time to time in any large complicated partnership. We are seeking to encourage from the research and evaluation and consulting communities proposals for designing ways to integrate these three approaches to providing support for a partnership. On the basis of what we receive, we will then know how to use the dollars that we've set aside in the Math and Science Partnership Program to support networks that we have put together. We hope that some of you and your colleagues will submit proposals for developing this kind of integrative strategy, to ensure that the partnerships are supported by an enriched cultural base. We are soliciting design studies or empirical studies that will link research, evaluation, technical assistance/consulting together in a much more meaningful way, drawing upon the shared knowledge of educational reform, some of which is tacit and some of which is published. Our hope, of course, is that we will end up with a very wide range of approaches that will draw on many different perspectives.

The idea behind what we're doing now and what we have been doing for some time is this: not only does EHR itself want to model a more integrative and consultative pattern of working with people like yourselves, but we want to create through the actions we take more capacity for you to interact with each other, and thus advise us on the best strategies for approaching these complex and very important questions. At one of the very first meetings that I had after coming to NSF in the summer of 2001 I had the chance to meet with several people from the tribal college environment and to find out what it means to teach science and mathematics in a culturally embedded way, that for me was a joyful experience. What I learned was enough to convince me that we have to adapt our evaluation strategies to recognize the need for these elements to be present. For example, it is important to understand the cultural tradition that an entire community supports every student and that every student will bring to the classroom and to the learning experience a cultural knowledge that needs to be recognized and connected in effective ways to the learning of science and math, and the use of technology. The traditional approaches to evaluation would not notice this at all. Therefore, as we work toward new instruments, new approaches and ways of thinking about these challenges, we need something that will capture what is meaningful to each community, and what is meaningful to the people who are leaders in those communities, and to the teachers, and to the students themselves and their families.

One of the foci we have for the Math and Science Partnership Program is to support the next generation of large-scale reform. We can begin to approach answers to four critical questions in a way that will capture the special context of environments in which this learning will take place. These questions are:

1. How do you adapt what is already known about teaching science and mathematics to your own situation? In particular, how do you adapt to the cultural context, however complex it is, of a particular school or a particular community? We really need to understand adaptation. I'm hoping that coming out of this kind of interaction and those to follow it we will have some way of looking at this question. One reason things don't easily move from one place to another is that they don't make sense at the new place unless they are changed to reflect the realities of the new environment.

2. How do you go from a promising small-scale something to a successful large-scale something? That is, how can we achieve scalability? How do you do this in a way that retains cultural knowledge, particularly when the move to scale includes different communities of interest that need to see themselves and this material in such a way as to not create a dissonance but to create a greater sense of common purpose and identity. This concern is very important to us.

3. How do you sustain this work over time? When I first came to NSF, I thought that meant, "What do you do after NSF goes home?" I've since begun to realize that this is not what sustainability means at all. The instabilities in our educational institutions are extraordinary. The transfer of leadership at the principal or superintendent level or other areas of leadership in a system are often so rapid that we barely get names on our electronic rolodex before we have to write in a new name. Teachers entering the field will probably be engaged in some other kind of employment within 5 years. I don't know how this works in tribal environments. I don't have specific data, but it would be helpful for us to know, and also for the community to know. Students move around within the space of any given year—40% of the students may be new to that classroom or that school. Policy makers shift what they think is important and how they want to define accountability. All of these issues affect sustainability along with the fact that anything that is devoted to improvement is considered discretionary, and it's very hard to find resources for it.
4. How do you build a strong case that will encourage others to undertake this same journey? How do you build the culture of evidence that gives people confidence that we are not experimenting on their children? At the same time, it's important to acknowledge we don't know what works.

How do we think about these four big issues—the adaptability question, scalability, sustainability, and the culture of evidence—all of which depend upon a strong, culturally valid context that supports the values, purposes and expectations of the people who are working together in a particular area? I read one of the workshop papers and it raised many important questions about what we should be measuring and who should do this measurement, who gets to define what is important and what isn't, and who gets to decide if we are approaching these goals. We need a broad repertoire of approaches in order to capture this cultural context. What we are trying to do at NSF is to broaden participation in the science, technology, engineering and mathematics educational environment, and advance the science and technology capability of the workforce as a whole. We cannot do this unless we understand how to ensure that people of all backgrounds are welcomed, that they are supported, and that they have every opportunity to learn in a way that is meaningful and useful to them.

Your thoughts, observations, participation in the review process and recommendations can help us understand the multicultural contexts for evaluation. We hope that you will participate in some of our solicitations. Your ideas will not only strengthen our ability to achieve these goals, which we are trying to incorporate into everything that NSF does, but will also contribute to the nation in ways that will last for many years to come. Thank you for being willing to come here, for contributing to our work and for letting us contribute to yours. I look forward to perhaps a short debriefing following the workshop so that I can then use it with proper attribution in trying to test every single program, first within my own Directorate, EHR, and secondly, within NSF as a whole, because EHR is looked to as a guide, a consultant and/or an advisor for other Directorates. Today, for example, I'm meeting with two advisory committees of other Directorates, Biological Sciences and Geological Sciences, and they want me to talk about diversity. Having a chance to hear from such a wonderful group of people, seeking your advice and your counsel in how to conduct our business will make us stronger. With that I thank you for the opportunity to speak to you. Have a good day.

Anselm Davis

As Dr. Ramaley mentioned, I am putting together a list of Native Americans who may have the opportunity to participate in one of the upcoming Math and Science Partnership (MSP) panels. If anyone here would like to be a panel member or know other individuals who might want to be on the panel, please give me your name or the name of the other person. I will need your occupation, e-mail address, mailing address and telephone number. I will then be able to get your name on the list. Different individuals who are putting panels together will be taking a look at the list as they determine the makeup of their panels. They like to have a mix of people from universities, from the schools, from industry, etc. We've been very fortunate so far to be able to get one or more Indian individuals on a couple of panels that have been put together. In fact, the latest individual who has been put on a panel is Tim Begaye. So, we've got a future panelist with us today.

You've heard a couple of times this morning that the State, the Urban and the Rural Systemic Initiatives are coming to a close. This spring, we funded the last five Rural Systemic Initiatives (RSI), a couple of which were tribal colleges. From this point on we will be overseeing and managing those initiatives until they are phased out. The way I like to look at the Systemic Initiatives is like a big wave that is coming to an end, coming up to the shore. It's not quite there yet, but it's getting there. We now have a new big wave, the MSP program, that is gaining a lot of energy and a lot of force.

Through the Systemic Initiatives, and especially the Rural Systemic Initiatives, a number of significant things have occurred. For the first time a tribal entity — the Navajo Nation — received funds for its own RSI. Tribal colleges and other entities receiving RSI funds have helped many district schools increase student achievement scores in mathematics and science. In addition, Native Americans have been given an opportunity to further develop their capacity to manage and run their own programs. One of the more important things that I think that has occurred at the teacher level, building principal level, Superintendent and School Board level—including tribal entities and tribal colleges—is the acquisition of new knowledge and development of leadership skills. This has given individuals involved in the RSI the opportunity to be more influential at the teacher, administrative and tribal levels as to how our children are to be educated. I think that's been a real significant impact that the Rural Systemic Initiatives have made. The other one is that, in pushing the concept of collaboration and working together, tribes, tribal colleges, schools and others have embraced the concept that it takes a village to educate a child. In the development of that partnership of working together with state departments, school districts and tribal entities, individuals involved with the RSI have been developing the capacity and the skills for partnering with one another.

During the past decade, we have been learning how to ride the NSF Rural Systemic Initiative wave. There were times when we lost our balance and were tossed into the wave. But, by getting back on the RSI surfboard and riding the RSI wave over and over again, we developed better skills. The Systemic Initiatives, especially for Native Americans, have helped RSI sites prepare for the next major wave, the Math and Science Partnership program. Hopefully we have developed enough knowledge and skills to be able to partner with other entities who are developing proposals.

Another dimension of our RSI effort is knowing what it is that they are really doing and how well they are performing. This is where evaluation comes into play. But who evaluates? And with what instruments? And what are the other evaluation issues confronting programs with large numbers of Native American children (e.g., the dearth of Native American individuals who are in the field of evaluation and individuals who don't know that much about Native Americans)? To address the issues of evaluation from a Native American perspective, evaluation and the RSI began working together. Concerns regarding such issues bring us together today. Now we have the opportunity to grapple with the issues relevant to evaluation, to surface them and amplify them and then address them and translate them into activities that go beyond this particular workshop. That is what we are asking you to do today.

Eric Hamilton
Interim Division Director
REC/EHR/NSF

It is your turn to talk. The only reason I would consider it worthy to interrupt that process is to make sure that you are aware of funding opportunities. So I am going to take just a few moments to go over them with you. You've had several welcomes, so you should consider yourselves extremely welcome. We are delighted to be sponsoring this workshop. Much of what we are trying to do in the Division is to build evaluation capacity. We are right now in the process of reviewing the first round of preliminary proposals for the program announcement NSF 02-034, with formal proposals due in June. These proposals required submission of preliminary proposals by a deadline that has passed. Please keep this in mind, but pick up a copy for later reference. There is a proposal that you can apply to now, with a deadline date of June 17th. You know that right now NSF, especially the Education and Human Resources Directorate, is deeply involved in the No Child Left Behind effort. It's a $160 million program for NSF this year, which is a large program for NSF. Through the MSP, the agency will be supporting partnerships with primary, secondary and tertiary institutions to promote a broad span of organized efforts to improve mathematics and science learning. This is a flagship program of the administration and, independent of where anyone falls politically, all can rally in word and deed around the rhetoric of "leave no child behind." The administration is putting a significant amount of money in NSF for the formation of partnerships to help spur achievement in science and mathematics by all PreK-12 students. A significant fraction of that program is set aside to develop and stimulate networks of evaluators and researchers and provide technical assistance to help partnership programs around the country.

We are building in real time a knowledge base on how these partnerships work. We are in the process of anticipating the new set of formative evaluations as these partnerships proceed. This is serious business, especially in the sense that if we do not build a useable knowledge base as we go forward and if the program accordingly then does not succeed, we will have been much worse off than if we had not tried the program at all. As part of that learning process, therefore, we are inviting proposals from evaluators and researchers for technical assistance, to design formative evaluations and research activities that focus on the Math and Science Partnership. Those proposals are due June 17th and if you go on the NSF Website and look up NSF 02-103, you will see the basic parameters. This gives you a sense of the direction in which NSF is going in its Education and Human Resources Directorate, involving the No Child Left Behind initiative. Beyond giving the canonical welcome, "we are glad you are here," I want to alert you to this opportunity and hope that you will share this with colleagues and broaden the participation that we might otherwise expect. Thank you very much.

SESSION 1: Evaluation Issues Relating to the Academic Achievement of Native American Students

Session Chair:

Cathie Martin
Group Leader
U.S. Department of Education/Office of Elementary and Secondary Education
Office of Indian Education

Presenters:

Eric Jolly
Vice President and Senior Scientist
Education Development Center

Rosemary Christensen
Assistant Professor
Humanistic Studies—American Indian Studies
University of Wisconsin, Green Bay

Discussant:

Grayson Noley
Department Chair, Associate Professor
Educational Leadership and Policy Studies
University of Oklahoma

Guiding Question

- The issue of the assessment of culturally diverse populations must be considered when promoting culturally sensitive evaluation. What are the specific evaluation issues relating to the academic achievement of Native American students? The discussion will highlight contextual factors, including rural vs. urban settings, approaches to high-stakes testing, test bias, test examinee preparation and best practices.

Papers/Presentations

On the Quest for Cultural Context in Evaluation: Non Ceteris Paribus - ᏬᎽᏀ Ꮭ[1]

Eric J. Jolly[2]

Introduction

A part of the title for this paper was borrowed from my composite memories of early studies in Poperian logic, statistical systems and economic formulations, for they shared the belief that an operative requirement to making a causal attribution between intervention and outcome was "Ceteris Paribus" (an idiomatic construction). This roughly translates into "all other things being equal." The natural title for this paper, it seemed to me, should be the negation or "non ceteris paribus" – all things are not equal. I follow it with an old Cherokee saw my father used to repeat – they never were. My point is that although we are not entering new territory when we discuss the cultural context of educational evaluation, we are often rediscovering, as if for the first time, the power of cultural nuances to disassemble the expectations and tools of the majority when applied to the minority.

Indeed, there are some tools of evaluation that lose their integrity in the translation to other cultures and contexts, but there are many that don't. It is more often our assumptions that lose their integrity under the scrutiny of new cultural contexts. For example, what are the questions we need to ask, how do we ask them (and in whose idiom?) and how do we appropriately operationalize the indicators of success that we track? All of these are issues that evaluators should reconsider whenever we change the context of our work.

Evaluators working across cultural contexts are challenged to find the difficult balance between cultural sensitivity and stereotypic thinking. We do, after all, compute an ANOVA in the same way, regardless of who our clients are. If the methods of analysis are not different, then we are often left to consider modifications in our goals, intermediate variables, outcome variables and evaluation protocols. It is in these considerations that we must exercise great caution. If Native American students and White students are both going to use mathematics to design a bridge, shouldn't we hold them to the same high performance standards? As Hughes has eloquently pointed out, "There is no argument against the logic that individuals within these groups must develop the same body of skills and expertise that standards require" (Hughes, 2000, p. 12).

What is different in evaluation of Native American education programs is the issue of context. The experiences, traditions and problem-solving approaches vary widely across Native American communities, from each other and from the majority community. In reporting on its guiding principles for evaluators, the American Evaluation Association points out that their principles "were developed in the context of western cultures and…the relevance of these principles may vary across other cultures and across sub-cultures within the United States" (American Evaluation Association, 2002).

In this paper, I will briefly review some of the issues of context for Native American education and then examine their implications for our work as evaluators.

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[1] On the Quest for Cultural Context in Evaluation: All things are not equal – they never were.

[2] The author would like to thank Patricia Campbell, Ph.D. for her review and suggestions on this paper.

The Context of Evaluation: Who are We Measuring?

According to the U.S. Census Bureau (which identifies Native Americans as American Indian/ Alaskan Native or "AI/AN") the Native American population is about 1.5% of the total U.S. population or slightly more than 4 million people. Of those people identifying as AI/AN, nearly 2 out of 5 identify themselves as more than one race.

In the years between 1990 and 2000, the Native American population had a growth rate more than four times that of the White population (26.4% vs. 5.9%) and twice that of the total population (13.2%). This difference in growth rate becomes even more pronounced when you take into account multiple racial categories (U.S. Department of Commerce, 2001).

This high growth rate is one contributing factor to the noticeably different age distribution pattern among Native Americans: 33.9% of the population is under age 18 compared to 23.5% of the White population (Jolly, 2002). The average age of a Native American is 27 compared to 33 in the general population (U.S. Census Bureau, 1995, 2000).

This pattern among Native Americans, unusual for the United States, is due not only to a burgeoning youth population, but also to a relatively small elder population and low life expectancy. In 1995, 12.5% of the general population was age 65 or older, but only 5.9% of the Native American population was age 65 or older (U.S. Census Bureau, 1995).

The population profile of Native Americans is quite different from the general U.S. population in many other notable ways. The purpose of this paper is not to provide a detailed accounting of demographic variables, but simply to make the point that there are many differences in the daily living and learning experiences of Native Americans, especially when compared to the White population. The following are a few examples taken from Clarke, 2001; U.S. Census Bureau, 1995; U.S. Census Bureau, 1997; and U.S. Census Bureau, 1998:

- About 1 in 3 American Indians aged 15 and over reported having a disability[3] and 1 in 7 reported having a severe disability. For those age 65 and older, the ratio is 1 in 2.
- Nearly one third (31.6%) of Native American households live at or below the poverty level.
- 23% of Native Americans report that they do not speak English "very well."
- By percentage of the population, one third more Native Americans served in Vietnam compared to the "average" American.

Among youth aged 12 to 17:

- Illicit drug use is more than twice as high (22.2%) as the national average (9.7%).
- Binge alcohol use is somewhat higher (13.8%) than the national average (10.3%).
- Use of cigarettes is more than twice as high (27.2%) as the national average (13.4%).

[3] A disability is defined as difficulty in performing functional activities such as seeing, walking, lifting and/or functions of daily living such as bathing, eating and dressing. A severe disability means that these tasks cannot be performed without an assistant or at all.

For youth aged 15 – 24:

- The death rate due to accidents is almost three times that for the total U.S. population and the leading cause of death.
- Suicide is the second leading cause of death with a rate 2.5 times as high as that for all races.

Given the relatively depressed health and economic context within which Native American youth live and learn, it should not come as a surprise that they also meet with less successful academic outcomes than their White peers. Although reports vary, it is estimated that nearly 50% of Native American students never finish high school (Indian Country Today, 1999).

The school experiences of Native American students vary widely depending on a host of factors. About one third of the students attend schools identified as "rural" by the National Center for Education Statistics (NCES, 2000). Another third are in large urban centers and the remainder is found in smaller urban and suburban settings. While in school, on or off the reservation, Native American students do not see many Native American role models in their classrooms. Nationwide, less than one half of one percent of new K-12 teachers are Native American and of those, about three fourths are women (National Education Association, 2002). Native American students do not find schools to be a source of inspiration either in teacher demographics and role models or in curriculum content and utility (Eberhard 1989; Tools for Schools, 1998). In addition, school is not a source of stability in many of these students' lives. One fourth of Native American students move and change schools each year (U.S. Census Bureau, 1995). As a result of these circumstances, students are not engaged and they are not achieving (Shutiva, 2001).

For many, the schools they attend are under-funded, either because they live in high poverty urban or rural areas or because they are attending schools under Bureau of Indian Affairs (BIA) operation. The BIA allocates $3,075 annually for each student and nearly 50,000 students attend such schools. Compare this with the $6,400 average per pupil expenditure of a U.S. public school (American Indian Education Foundation, 2002).

Native American K-12 achievement indices in schools do not match the national average on any standardized test. For example, while 28% of fourth-grade White students score at or above the National Assessment of Educational Progress (NAEP) proficiency level in mathematics, only 8% of Native American reach that level. By twelfth grade, the disparity is even greater with 20% of White (and 33% of Asian) students scoring at or above the NAEP proficiency level in mathematics and only 3% of Native American students doing the same. The percentage of Native American students scoring at NAEP's advanced level in mathematics is 0 (Campbell, Jolly, Hoey and Perlman, 2002)![4]

Of those who do graduate from high school, only 17% will go on to any form of college, compared with a national average of 62%. The Native American college population is predominantly female (60%) and is most likely to enroll in a two-year institution (50%) (Native American Public Telecommunications, 2002). The transition to, and success rates in, four-year institutions are quite perilous. At the time of the 1990 census, only 2.1% of Native American high school graduates had a bachelor's degree or higher (U.S. Census Bureau, 1995). The rate of graduate degree attainment is even lower, with the greatest disparities in the quantitative and scientific disciplines. For example,

[4] Individual Native American students do score at superior levels of math proficiency. However, the overall percentage is so small that it rounds to 0 percent for reporting purposes.

in 1997 the National Science Foundation (NSF) reported only one American Indian doctorate in the field of computer science. Overall, Native American participation in quantitative and scientific disciplines is less than half of what would be predicted based on population (Commission on the Advancement of Women and Minorities in Science, Engineering & Technology, 2000; Campbell, Jolly, Hoey and Perlman, 2002).

Context and the Evaluation Plan

What is the purpose of presenting this highly selective thumbnail portrait of Native American life? Although the picture that it paints seems quite bleak, this is not intended to serve as an entry into the "Oppression Olympics." It is too easy for any sub-group to get lost in the pity of the portraiture rather than to frame these issues as challenges that must be accounted for in reform efforts. The demographic information presented above is simply meant to highlight some aspects of the context of evaluation, which we should take into account in developing our evaluation frameworks.

For example, take the statistics of Native American student mobility. When 1 in 4 students changes school each year, we may have to rethink the methodology for longitudinal studies. This mobility will impact how we collect permissions, work across different school systems and document non-continuous interventions, to name just a few core issues. Another example can be found in how evaluators respond to the high level of disability in the Native American community. Such issues as test accommodation, in terms of test modality (e.g., oral versus written), time (e.g., extended time or multiple sessions) and location (e.g., individual or group setting) must be taken into account in our evaluation and data-collection strategies.

As a third example of the importance of understanding context, we should consider the fact that 23% of Native Americans do not speak English very well and many speak a language other than English at home, often a language for which they do not have a writing system. This should impact the way that we phrase instructions and how we frame questions that are intended to assess some function other than English literacy. As Lena Canyon long ago pointed out, traditional adult-to-child instructions in the Native community include context-rich environments with verbal instructions augmented by a high level of gesture and other visual cues (Canyon, Gibbs & Churchman, 1975).

Taken together, these context variables create situations that challenge even the most seasoned evaluators. Canyon has documented how the cumulative effects of these differences can reek havoc on the best-formulated plans. As she reported on one evaluation effort, "supplies ran out unexpectedly or were lost; test equipment was broken; (and) factors not included in the evaluation plan were discovered late in the school year to have been important" (Canyon, Gibbs & Churchman, 1975).

There is much that can be done to assure the utility and appropriateness of an evaluation plan. The factors above and other issues of cultural context are not limiting factors; rather, they are a part of what will inform the whole story of our evaluation. They are also factors that might cause us to reconsider the appropriate place for cross-cultural group comparisons and even some standardized procedures since, after all, "non ceteris paribus."

Missing Bricks

In most communities of practice or association there exists a foundational knowledge base that is presumed to frame the ideas and discussion among members. Within professional organizations, this shared knowledge base and communication style is often considered a “theoretical frame” and the argot of the profession are classified as “terms of art.” In communities of association, much of this presumed understanding falls within the broader category of “local culture.” In all cases, this notion refers to the assumed shared understanding of culture, context and experience that allows us to speak in an abbreviated idiom with certainty that the other understands both the stated and unstated intentions of our words and deeds.

When people from different professional or social communities meet, they are often very attentive to the challenges of crossing the cultures of their experience and will spend time exploring terms, their meaning and their underlying assumptions. As people become more familiar with each other’s cultures, they begin to spend less time verifying the meaning and intent of their communication and more time speaking in what they presume to be their shared idiom. At this point, they have assumed that they share a foundation of common knowledge, experience and cultural understanding. In my work across diverse communities, I have become aware of one of the more interesting quirks that accompanies this assumed shared foundation of knowledge. I refer to these quirks as the “missing bricks” from this foundation of knowledge.

Let me illustrate. When I was a young graduate student and invited to my first cocktail party at a faculty member’s home, I borrowed a tie, pressed my pants and headed off for the party determined to fit in. The first conversation in which I was engaged was absolutely painful for me. The discussion centered around modern European art and the work of a dozen artists whose names I did not know. I stood around smiling patiently, hoping desperately that someone would change the focus of the conversation to something I knew. Finally, my reprieve came when an esteemed faculty member turned to me and, changing the topic to food and fine dining, asked me what I thought of pollack. Having worked in a seafood restaurant during my studies on the East Coast, I thoughtfully proclaimed that I found pollack interesting, but sometimes a bit bland. As the conversation continued, I was a bit surprised that they were still discussing issues of art. It was perhaps six months later that it finally dawned on me that they had been discussing Jackson Pollock, the artist and not the fine fish. The fortunate choice of wording on my part allowed the “missing bricks” of foundational knowledge in this cocktail party community to pass undetected.

Since that time, I have encountered many instances in which I find myself working in communities where I have “missing bricks.” They show up in misunderstandings about such things as community needs, demographics, goals and history. The misunderstandings may be about something as simple as understanding why Americans are so enamored by refrigerator magnets to issues as complex as the religious significance of an owl’s feather. A critical challenge for evaluators is accepting the possibility that they too have “missing bricks.” The challenge lies not in the identification of the obvious areas where we know that we lack deep cultural knowledge, but in the identification of those instances where we confuse “Pollock” and “pollack.”

In cases where evaluations are being constructed, implemented and/or interpreted across cultural lines, evaluators must be especially vigilant in exploring the possible disconnects in foundational knowledge among those who are being evaluated, doing the evaluation and using the evaluation. The community whose programs are being evaluated must have a meaningful presence in

constructing both the goals of, and the means to, the evaluation. Moreover, the community context must be clearly represented to those who will interpret the evaluation, its processes and outcomes to render decisions around program design and funding.

It is therefore incumbent upon the evaluator to examine the potential interaction of cultural context and evaluation activities. To do this, an evaluator must have a fundamental awareness of cultural norms and experiences of the people with whom he or she is working. Evaluators must develop an understanding of how these norms will play out in the context of evaluation instruments and protocols. And they must develop the skills to translate materials and represent data across cultural contexts so that the evaluation informs the process of reform in meaningful ways that can be addressed by the existing and emerging systems within the community.

Context and the Questions We Ask

Although we might not have different standards for performance-based outcomes, we certainly can and should frame the context of education reform activities within the cultural surround that helps define the essential elements for student success.

In organizing the research base for the report "Upping the Numbers: Using Research-Based Decision Making to Increase Diversity in the Quantitative Disciplines," Campbell, Jolly, Hoey and Perlman (2002) identified three broad factors that together describe essential elements for student advancement: engagement, continuity and capacity. These three elements collectively describe the features that must exist for every child to create a successful pathway for advancement in Science, Technology, Engineering and Math (STEM).

- Engagement requires an approach to STEM that includes such qualities as awareness, interest and motivation.
- Continuity requires institutional and programmatic opportunities that support advancement to increasingly rigorous STEM content.
- Capacity requires the knowledge and skills needed to advance to increasingly rigorous STEM content.

Individually, each of these features is not sufficient for advancement along the STEM pathway. For example, if the educational system is aligned for continued student advancement and the student has high interest in STEM but has failed to achieve the requisite skills to advance to the next level, he or she simply will not be able to advance. Similarly, if a child has succeeded in content mastery and the educational system supports his or her further advancement but the child has no interest, he or she will also leave the STEM pipeline. And finally, if the student has competency and interest but the system does not offer such opportunities as Calculus, AP courses and even information on colleges and financial aid when needed, then the student will not be able to advance.

This trinity of essential elements for student success can also help identify three essential areas of focus for an evaluation plan. An evaluator can ask and assess the degree to which a student is engaged in the field of study. An evaluator can assess continuity and congruence in the system that allows student advancement in the field of study. And, finally, the evaluator can assess the degree to which the student has attained capacity in the field of study.

The degree to which culture comes into play in evaluation varies across these three areas. For example, the means to “engagement” of a student are likely to vary greatly across cultures and the measures of engagement may also vary. Who we identify as role models, how we identify individual or group aspects of engagement and how we inspire students to find meaning in a field of study will relate to how that field is manifest in the student’s community.

Identifying the cultural variability along the dimensions of continuity is a little more difficult. Here the evaluator needs to identify both the formal and informal systems of education and guidance that help students navigate the system. For Native American students, for example, the high school to college transition often involves an intermediate step through a community college system. In addition, many Native American students step in and out of college programs several times while in pursuit of a degree (McAfee, 2000). McAfee adds “stepping out” as an additional classification to our traditional construct of dropouts and matriculates. Here is an example of how we may need to reconsider an operational definition for traditional evaluation frameworks as we conduct research across cultures.

Finally, along the dimension of capacity, we should expect the same performance-based outcome for all students. However, the demonstration of that capacity may occur in differing ways. When assessing a student’s capacity, we should be certain that extraneous factors, such as time orientation, language, or attitudes toward public versus private achievement do not undermine our assessment.

Conclusion

Coming to terms with the cultural context of educational evaluation challenges us to review the most fundamental assumptions about our work. We must understand and be responsive to the nuances of culture without lowering our expectations by creating measures that reinforce stereotypes. We are challenged to create situations that offer alternative ways to demonstrate capacity and that recognize skills when they are displayed in a culturally appropriate way. It is the evaluator’s responsibility to gain a deep enough understanding of a culture to be able to develop tools and protocols that accurately reflect achievement of the goals of the educational programs. Within the Native American community, this can mean understanding and evaluating community, as well as individualistic, outcomes.

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Cultural Context and Evaluation: A Balance of Form and Function

Rosemary Ackley Christensen

"If we come out of it the second time and we've managed not to acquire some degree of understanding of our own foibles and insensitivities and misunderstandings, if we wind up in this exact same moment, then we're idiots. We ought to be able to learn."

--*New York Times* (2000, June 11), p.18, by a New York writer telling how he learned to work with African Americans by listening carefully and using time wisely, so that after each time, working with each other got better.

Introduction/Background

Native American children in the United States still lack success in school achievement. Perhaps the wrong thing is measured, or the treatment provided lacks something still. Maybe our kids don't belong in these "white-man" schools. In the tribal schools, the children are also behind, at least in the ways in which the white man measures progress. Currently, education literature provides dreary tales of the achievement gap, with charts and data on Web sites. Possible success stories are not very lucid on whether minority students are actually a big part of any real accomplishment. A recent chart, *Raising Achievement,*[5] showed 17% of Native American fourth-grade children were at or above proficiency in reading compared to 40% of white fourth graders and 14% were at or above proficiency in math compared to 34% of white fourth graders.

Plainly, we need successful demonstrations and feasible blueprints that address and seriously consider the real world our students are in, a world where they are unable to measure up to the white man's standards and evidently are not successful in a traditional Indian world either. We Indian educators have been around for several decades now and educational achievement doesn't appear to be appreciably better, although it has not been for lack of trying many things.

Cultural Context

In an effort to make sense of a cultural context for evaluation purposes, at least four important concepts need to be discussed:

1. The Native American worldview is a holistic one[6] formed by Elder epistemology or knowledge, with core values stemming from this knowledge. These values, making sense in this worldview, form principles for living and functioning through oral tradition. This form of passing knowledge uses participation learning that reflects pattern thought (see for example, Ross, 1992; Diamond, Cronk & von Rosen, 1994; Thorpe, 1996; Martin, 2001;

[5] See www.NoChildLeftBehind.gov (accessed in May, 2002).

[6] "Native philosophy and religion, language, historical perspectives and contemporary approaches to life are holistic in nature. That is, Native thinking sees the world and its elements in a certain totality, with a whole-to-parts mode of consciousness. This high-level mode focuses on the whole pattern, the whole concept, the overall picture of the perception of stimuli. Relationships among the parts making up the whole pattern are intuitively felt, but are not specifically obvious nor important. Logical, temporal, factually detailed components of the overall perception do not command attention in themselves…" Manitoba native educators Margot Flanagan and Ellie Iverson in Diamond, et al., 1994, p. 8.

Cajete, 2000). The 3 “Rs” or principle behaviors that fit tribal education are respect, reciprocity and relationship. *Respect* is acceptable behavior between and among all living things. *Reciprocal behavior* forms a grid among living things on the Web of Life, which forms and builds *relationships*.

This world is holistic in nature (see, for example, Brown, 1988) and Indians live currently in a very linear world. The Academy, an important part of the white man’s world, is linear and hierarchical in nature (see, for example, Wasson, 1973). Primarily, educational research projects currently funded by state and federal resources follow the form and function of the Academy relative to research.

2. The cultural context that reflects Native Americans includes a worldview, values and learning very different from that of the white man.
3. The holistic worldview concepts—participation learning, the core value of personal sovereignty, the grid behaviors of relationships, respect, reciprocity and the oral learning mode within natural circular and spiral teaching forms utilizing a group process—are teachable and learnable.
4. A culturally responsive evaluation plan assumes the item, object, thing or unit being evaluated will occur within a similar or somewhat similar cultural context as the evaluation plan.

Analysis/Reasoning Context

In looking at cultural context for evaluation, it is important to imagine and then understand certain situations in Native American culture. There are over 550 Indian tribes in the U.S. (Wilkins, 1997). Each is considered a sovereign nation by the federal government as defined by legislation (based on treaties) and case law. Many tribal languages are spoken, although these are rapidly being lost due to the overwhelming use and need for the English language. Each tribe has many differences from other tribes. Yet, it can be postulated that many if not most of these tribes share a common worldview, with life principles that fit this way of thinking. Many tribes look to Elders for tribal learning. Yet, within the holistic worldview, tribes are culturally different, one from another.

Due to the changes brought by the white man over several centuries, Indian people have suffered a great deal, yet they hold on to certain aspects of a remembered past. They live, work and play as Americans, with many attending the same schools as other Americans. The Elders and scholars, however, speak to and worry about the damages suffered to a traditional way of life (see for example, Thorpe, 1996; Gulliford, 2000; Tinker, 1993; Cook-Lynn, 2001).

In order to understand, learn and ponder a common cultural context useful for responding to a Native American perspective, it is helpful to consider the state of Indian education using ordinary measures, gain a normal understanding of suitable cultural contextual attributes held by Native Americans and juxtapose these characteristics with what evaluations usually use for these traits in the current educational framework. The state of Indian education can be best understood through a brief discussion of the achievement gap. Commonly held cultural norms are briefly discussed. A widely held notion, internalized oppression, is useful in understanding intertribal relationships, Indian students’ discontent and that of Indians with other Americans. Research as a construct is

discussed from an indigenous perspective. And the Indian educational leadership, a group frequently asked to lead activities for real change, is itself put in perspective relative to these issues.

Minority Achievement Gap Issues

The achievement gap appears to defy researchers to this day, according to reports that point out the lack of a definitive explanation for the gap but are able to offer theories as to why the gap exists.[7] Reasons provided include poverty, non-challenging academic coursework, peer pressure (to not do well), student turnover, parenting (looking for differences in parenting of kindergartners), less access to preschool, teacher quality, stereotype threat (having to identify race in tests and other academic tasks), teacher expectations, television, test bias and genetics (Viadero, 2000). Some of the more successful program concepts or plans to lessen the gap deal with: l) the effects of poverty (and or effects of race bias), 2) teacher training, 3) parental involvement, 4) motivational constructs, 5) emotional treatment (bonding with student by an adult that creates a trusting relationship), 6) preschool and/or early childhood programs, 7) class size limits and 8) various curriculum efforts that fit with one or more of the above. A study by RAND (Grissmer et al., 2000) indicates that ten states led by Texas have seen steady improvement on minority students' tests in math and reading for approximately a decade. The solution appears to contain state standards, tests by grade, adequate resources for teachers, lower pupil-teacher ratios and subsidized pre-kindergarten (Education Week, 2000).

A plan/design for looking at the gap problem, researched and written for a Wisconsin State organization (Christensen, 2000), centers on the process, encouraging districts to utilize forms that are more apt to provide comfort to minority groups than the currently utilized linear model reflecting popular majority culture. The particular process used in this design reflects a more holistic world in tune with minority worlds although projecting that no harm will accrue to the white linear world student. Districts are encouraged to work in groups, infuse some holistic ideas, take advantage of sharing some costs and realize that districts share similar problems that can be worked on together in a more efficient, cost-effective way.

Recently, a district in northern Wisconsin agreed to work toward understanding why it and a nearby reservation were feuding in public. The Indian Nation had asked the Office of Civil Rights to intervene. The district had asked the State Department of Public Instruction to give counsel and advice.[8] In the spring of 2000 this problem was being worked through, with a long-term solution being sought by the district. In several days of talking to Indian community members it was clear that the Indians and the school district did not understand each other. District personnel spoke to the need to treat everyone in the same way. The Indians reported that their kids said that they were ignored, not allowed to participate as the 'stud' jocks did, and that they did not like school. In a short-term solution,[9] district personnel agreed to a full-day dialogue where they discussed how Indians differed in their way of life from the non-Indian community. A long-term solution offered to the district speaks to the achievement gap and suggests faculty and staff learn cultural

[7] Viadero, D. and Johnston, R.C. (2000, April 5). Lifting minority achievement: complex answers. *Education Week*, four part series on the achievement gap.
[8] Department of Public Instruction, State of Wisconsin. Letter dated Feb. 19, 2002, to school district superintendent.
[9] Based on Christensen, R.A. (2002, March). Exploring connections between the Indian reservation and the school district: a meta-plan for collaborative action. Unpublished document.

competencies relative to Native Americans, how teaching methods can be amended to include behaviors more attuned to a holistic worldview and that Indian students be provided assistance/ strategies in understanding and coping with the concept of internalized oppression.[10]

A northeastern Wisconsin school has agreed to work on the achievement gap problem by looking at a cohort group beginning with the first grade and following it to the eighth grade. This effort is to begin in the fall of 2002. The district will make an effort to measure how its interventions meant to lessen the achievement gap actually make a difference (or not). Meanwhile, the district will look at ways it can learn about and work with its minority community toward lessening the achievement gap. Prior to this agreement, the district did not know how the same students did from one year to the next (that is, the same group of students that received programs meant to help them achieve success). The district is working with a community advisory group.[11]

The three tribal “Rs” of respect, reciprocity and relationship are the grid in the frame of the design plan. This allows usage of the bonding method with students, a strategy that uses respect between teacher and student as a base premise (mentioned in the gap literature). This cultural context needs to be part of instructional program coherence (IPC) within schools. Newmann et al. (2000) define IPC as “a set of interrelated programs for students and staff that are guided by a common framework for curriculum, instruction, assessment and learning climate and that are pursued over a sustained period” (p. 297). They suggest that IPC may make a difference in school improvement.

On the Navajo reservation in the Arizona desert, in an oral interview,[12] Bobby Wright, formerly with NASA, explains his successful math curriculum on building sheep corrals and making turquoise jewelry. Mr. Wright is using a simple but effective concept: that to reach his students he must build on local knowledge that makes sense after school is finished. Called by some “building on the local,” and by others, constructivist pedagogy, it is a strategy that works for those that try it. The National Council of Teachers of Mathematics (NCTM) recommends the use of constructivist pedagogy (NCTM, 1989). They recommend this curricular approach because math is used in ways that students can relate to the real world, the way they think and that they will use for lifetime purposes. Obviously, if children come from a different cultural environment, their world will be reflected in this approach.

Two Elders in the Stockbridge-Munsee woods of Wisconsin provide assistance to school districts and others in understanding cultural difference. They encourage sharing of ideas, building opportunities for cooperation and solidarity and most importantly “enabling groups to translate thought and ideas into action.”[13] Using Elders to assist those who want to learn is a fine traditional method and reinforces the notion of community that is so valued by Indians. It is clear that U.S. society is still considered a racist society, in itself a problem when addressing minority successful education. The two women teach thoughtfully about racial bias by working in groups through the use of a *bias bag* to understand and appreciate how racism works.

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[10] See Christensen, R.A. (2002, May). A long-term plan for a school district, including a report of short-term effort. Unpublished document.

[11] *Minority Student Achievement Sub-Committee* notes by member R.A. Christensen, 2001-2002. Hand-written notes, letters, minutes from school district, unpublished documents.

[12] Interview at the school while R.A. Christensen was on a site-visit, 2000. Hand-written notes, unpublished document.

[13] Quote from Ruth Gudinas, July 2000. Full Circle is the name of the partnership that includes Elder Dorthy Davids and is located on N9136 Big Lake Road in Gresham, WI 54l28.

The *New York Times*[14] spent a year examining racial issues, noting in the series that, "Race relations are being defined less by political action than by daily experience, in schools, in sports arenas, in pop culture and at worship and especially in the workplace."[15] As Susan Kepecs said, quoting a member of the Latino community in Madison, Wisconsin, "people need to see themselves reflected in the social fabric" so kids spend two years immersed in Latino cultural events sponsored by the Madison Children's Museum.[16]

Any good plan will use and encourage various levels of evaluation built into strategies that make sense and are useful to the districts and organizations over time. To make it culturally relevant to the group studied is another matter. It is important to monitor the fit of the treatment with the population treated, especially a minority population. For example, a district may welcome and encourage many teachers to join in teacher training programs, but may not ascertain through adequate monitoring or evaluation whether the training actually affects instruction in the classroom for the sample group. Usually, too, the teachers are not tracked, so they may get the same initial information over and over again. Frequently districts use "opinion-airs" as evaluation measures for training efforts.[17]

Oral research/resources provide an entrée to the cultures of many minority groups. It is logical to use oral elder knowledge to establish and document a suitable cultural context. Respect is established from this form of documentation and comfort is provided to the student through this process. One is also able to access the wisdom and knowledge of elders that may be denied a researcher by using only written literature.

Indian Educator Leadership

Winds of Change, the publication of the American Indian Science & Engineering Society (AISES) recently featured a discussion of leadership development in Indian country.[18] The question posed was, "*Where are the new Indian leaders*? " Gerald Gipp (Lakota, Standing Rock) discusses leadership paths in the decades of the sixties and seventies.

"During this time, pioneering graduate degree programs at Pennsylvania State University, Harvard University, University of Minnesota and Arizona State University were successful in providing academic training to a critical mass of American Indian students… What appealed to me most was the opportunity to go to a major university and to take advantage of the resources there. It created a network of Indian people, not just those at Penn State but those in other programs as well. We were encouraged to get together with the other programs. We really got to know each other" (p.15).

Gipp explained that changes started to occur in Indian education, led by people from these programs. "Shortly after the programs began, we saw these changes—reform in Indian education, reform in self-determination, issues of school control—all these legislative efforts were led by people from the programs. They took the leadership roles" (p.16).

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[14] How race is lived in America, a 5-week series. *New York Times* (2000). (www.nytimes.com)
[15] Scott, J. (2000, June 11). *New York Times*, p. 17. Fourth article in series.
[16] Icaliente in the culture. (2001, June 23-29). *Isthmus* 25(25), pp. 15-16.
[17] Based on collected evaluation sheets from district(s) training efforts for minority populations where respondent is asked how something was liked on a scale of, for example, one to ten.
[18] *Winds of Change*. (2002, Spring). 17(2), p. 15. AISES, 4450 Arapahoe Avenue, Suite. 100, Boulder, CO 80303.

Deloria and Wildcat (2001), in speaking about involvement by Indians in education and the notion of cultural difference, say that the "thing that has always been missing in Indian education, and is still missing today, is Indians. In spite of the many advisory committees, national organizations and graduate programs in education that purport to deal specifically with Indian education, we see nary a trace of Indianness in either efforts or results" (p. 152). Deloria says that he may offend Indians that serve in these national organizations and committees, but it is his opinion that, "they generally leave their Indian heritage behind and adopt the vocabulary and concepts of non-Indian educators and bureaucrats, following along like so many sheep" (p.153). He states a mistake these Indians make is believing that "in adopting the technical language of modern education they are making Indian needs relevant to influential people who can help turn Indian education around" (p.153). Deloria talks about cultural differences by beginning with the fact that there are many cultural differences that exist between Indians and non-Indians. He selects several items (beginning with how Indians compete) to illustrate his point, acknowledging that various behaviors and effects could be used as illustrations.

He speaks about tribal elder knowledge, oral tradition and the Indian holistic worldview "where the parts and their value are less significant than the larger picture and its meaning" (p.155). He makes a case for using the cultural methods and techniques of tribal elders as non-Indian techniques and methods have certainly "proven themselves failures" (p. 154). He makes fun of current techniques passed as Indian. "If the child wants to understand the whole, we simply dress up the parts in buckskin and pretend that we have answered the problem" (p.155).

Community Involvement

Szasz (1999) in her "Indian Voice" chapter 16, discusses Indian educators concerned with involving community by using the example of their activities during the White House Indian Education Conference in 1995. She quotes John Tippeconnic (then director of the Bureau of Indian Affairs (BIA) Office of Indian Education Programs) stating that, "Tribes should determine what is taught to their children" (p. 226), which she says reflects Tippeconnic's experience in "years of dealing with the contending forces in Indian education, the tribal governments and the community and professional educators" (p. 229). She views these educators as having developed a network that was effective and efficient by the 1990s. They traveled to conferences, served on various organizations, were readers for federal agencies that granted funds to Indian tribes and organizations, staffed offices and led agencies in Washington, and as she says, their activities "enabled them to mobilize with considerable strength when confronting those crises that appeared with increasing frequency during the 1990's" (p. 203).

Tribal educator and Director of the Menominee (WI) Tribe's language project, Alan Cauldwell (Menominee) speaks frequently to the need for indigenous community action. He sketched for other discussants at an educational meeting in Oshkosh, Wisconsin in March 2002 his notion of what is important: community involvement or Indigenous Community Action (ICA). ICA uses the medicine wheel frame with four quadrants. In the upper left are the words, "Power" and "Grandmothers," in the upper right, "Strength" and "Warriors/Veterans," in the lower left, "Knowledge" and "Indian Educators" and in the lower right, "Leaders" and "Mothers." Community change is possible when the right forces are recognized and brought together to make change for the children, using power, strength, knowledge and leaders.[19]

[19] Cauldwell sketch, unpublished document, no date. Obtained March, 2002.

Internalized Oppression

An important issue to consider regarding cultural context in education is the premise of internalized oppression. Durán and Durán (1995) (see also Fixico, 2000, chapter 2[20]) begin their section on internalized oppression with a discussion of the coercive boarding school public policy of the United States. The policy removed Indian children from their families and their education through tribal knowledge, by trickery and deceit. Durán and Durán (1995) explain how this policy and other policies of the federal government were policies of oppression:

"Once a group of people have been assaulted in a genocidal fashion, there are psychological ramifications. With the victim's complete loss of power comes despair and the psyche reacts by internalizing what appears to be genuine power—the power of the oppressor. The internalizing process begins when Native American people internalize the oppressor, which is merely a caricature of the power actually taken from Native American people. At this point, the self-worth of the individual and/or group has sunk to a level of despair tantamount to self-hatred. This self-hatred can be either internalized or externalized" (p. 29).

Anishinaabe Elder Lee Staples, in his work with youth, elders and community, has taken the notion of internalized oppression (IO) and worked with it in both his native Ojibwe language and in English. He says that until Indians learn, work with and understand the effects of internalized oppression, we will not be happy or successful with the results of our educational efforts (Staples, 2002). It has become part of our cultural background and we must deal with it. He has extensive experience functioning with Indians and non-Indians on this issue. He developed and works with a cognitive map, *Cultural Continuum: A Diverse Path*. Knowledgeable in his oral tradition and language and experienced with skills acknowledged by Ojibwe-first speaker elders, he works as a Native psychologist unfettered by the academy's degree structure or over-confident approach. He consults with the University of Minnesota, Duluth Social Work Department Native American Project, Cultural Language Institute and is Consultant and Cultural Advisor to the Chief of the Mille Lacs Band of Ojibwe Indians (Minnesota).

Conversant with Durán and Durán and with other materials available from the Internet and the usual sources, Staples works with oral lessons from elders. Ojibwe is his first language; he understands clearly and is growing in strength and knowledge of oral tradition. He explains how internalized oppression works among Indian people, giving examples that illustrate how we show hostility and anger toward other Indians based on perceived slights, insults and implied criticisms. As cultural director of a current language project in Ojibwe country, he is advising project personnel to learn about internalized oppression, discuss its effects during project meetings and investigate strategies for minimizing these effects, so that a project evaluation will reflect a successful project and that something in the nature of new knowledge that might help other projects will occur. He and others have come up with a way to keep track of IO effects on the project.

[20] On pp. 26-42, he has a chapter on stereotypes and self-concepts, illuminating the issue of internalized oppression, and he describes and discusses the problems that impede progress.

Tinker (1993) says:

> "Internalized racism (resulting in a praxis of self-hatred) [should] surprise no one. The phenomenon is part of a much broader process that can be seen in other aspects of human existence. Just as an abused child slowly but inevitably internalizes a parent's abuse as a consistent demonstration of the child's own shortcomings and may even regard the life of the abused parent as exemplary, so communities of oppressed peoples internalize their own oppression and come to believe too many of the stereotypes, explicit and implicit, spoken by the oppressor" (p. 3).

A *Winds of Change* article[21] quotes Norbert Hill, Oneida (WI), "I learned long ago that Indian leaders have to withstand the bullets in the front and the arrows in the back. We take arrows in the back when Indian people shoot at us. If we could learn to turn to each other rather than on each other, the bullets from mainstream society would not affect us as much" (p. 17). The article speaks to the young people viewing leadership as a vehicle "to invite harsh personal criticism and hostility from their own people. They allude to the phenomenon of internalized oppression…" (p. 17).

Durán and Durán (1995) invite Indians to seek our own way of doing things: "The legitimization of Native American thought in the Western world has not yet occurred, and may not occur for some time. This does not mean that the situation is hopeless in the Native American community. The Native American community can help itself by legitimizing its own knowledge and thus allowing for healing to emerge from within the community. If the perpetrators prefer to live in denial, that is an issue with which they will have to deal presently and historically" (p. 53).

Indigenous Research Issues

Smith (1999), in her discourse on indigenous research, discusses research and its progeny. She observes how research that is known and practiced today is actually part and parcel of European colonialism. It reflects the European worldview and values. She advocates activities to decolonize research methods. The models (Graham Smith, p. 177) discussed echo the cultural mode of the indigenous person. Research defines legitimate knowledge (p. 173). And evaluation, a natural issue/offspring of research, has two reasons for existing, according to the User-Friendly Handbook (NSF, 2002): it 1) provides information to improve, and 2) provides new insights, or new information that was not anticipated (p. 3). Smith says research methods should ensure the problem has an appropriate set of research strategies and that the information sought "is accessed in such a way as to guarantee validity and reliability. This requires having a theoretical understanding, either explicitly or implicitly, of the world, the problem and the method" (p. 172). She says it is important in a cross-cultural context to ask important questions:

> "Who defined the research problem?"
>
> "For whom is this study worthy and relevant? Who says so?"
>
> "What knowledge will the community gain from this study?" (p. 173).

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[21] Passing the torch. *Winds of Change.* (2002, Spring).

It is useful to search for research theories that are flexible enough to accommodate cultural differences. There are sufficient materials, for example, on grounded theory that will help researchers in this regard.[22]

Cultural Context is a Sense of Place

Finally, we must be cognizant of our sense of place. Cajete (2000) explains, "the psychology of place"(p. 187). He explains how Indians fit into Turtle Island and how Turtle Island fits into them. It is the cultural context of Indian country. He says, "Indeed, this perception is reflected throughout myth, ritual, art and spiritual traditions of Indigenous people everywhere because in it is a biological reality. All human development is predicated on our interaction with the soil, the air, the climate, the plants and the animals of the places where we live. The inner archetypes in a place formed the spiritually based ecological mind-set required to establish and maintain a correct and sustainable relationship with place" (p. 187). In an earlier book, Cajete, from Santa Clara Pueblo (New Mexico) explains this sense of place in the Web of Life as the seventh sacred direction.

The concept of wholeness and what it means in the contemporary world is difficult, especially when we find ourselves in a very linear world organized by Euro-Americans. We are all taught in school to believe that only the linear, hierarchical world is sensible. Kincheloe et al. (1998) provides a discussion on whiteness in a similar way that racism as a subject is studied. A teacher writes a particular chapter about the three stages she went through as she developed into a teacher, with the first stage, "the white savior." Whiteness, the authors say, defines the Academy's practice as much as any other indicator.

Conclusion

Wholeness characterizes, frames and defines a culturally different world. It is a traditional Native world where the parts fit into the whole, where motion is circular, activities spiral to and from the center, and every living thing is related. "*Mitakuye Oyasin*," the Lakota say to end their prayers, to greet and to say farewell. Cajete (2000) says the phrase identifies and explains community (p. 86). It is the context within which we live and work. It is what we strive for with all our being. It is inclusive rather than exclusive, seeking to fold everyone into a relationship, one that ensures that all living things are in balance. Brown (1982, p. 71) notes that Native people "generally do not fragment experience into mutually exclusive dichotomies, but tend rather to stress modes of interrelatedness across categories of meaning, never losing sight of the ultimate whole." The beliefs, philosophy, epistemology and oral tradition found in a holistic world will be reflected in its educational practices, learning and teaching pedagogy and interrelated activities with others.

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Discussion Highlights
Grayson Noley

These two interesting papers by Dr. Jolly and Dr. Christensen are intended to contribute to the debate surrounding issues of achievement and how achievement should be measured, a task both papers certainly accomplished. The concerns held by those who evaluate programs intended to improve Native American children's achievement were listed and discussed, although the conclusions reached or implied mostly rely on "common sense" rather than empirical research. In reality, it appears that the errors made by those who reach conclusions about the academic problems faced by Native American children begin with common misunderstandings. These would include, for example, not accounting for issues related to language, poverty, culture, etc., when aggregating data and identifying achievement deficiencies and planning for interventions. To the credit of the authors, they do not propose to give definitive answers but rather seek to give more insight into a quest for a better definition of the question.

Professor Christensen's paper begins with a list of speculative conditions that are believed to lead to the so-called achievement gap. This list, while perhaps not exhaustive, is extensive. It describes conditions that affect both Native American children and the institutions that purport to serve them. These are the conditions that are unpleasant in their realization, such as poverty, prejudice and lack of opportunity among others and are not new to those of us who are long-time observers of Native American children and American education. These are conditions that cannot be ignored in the explanation of lower achievement levels of some Native American children, yet they also are conditions that can lead to other devastating assumptions that, in turn, can also contribute to poor self-esteem that results in underachievement. This is an important issue to which I will give more attention later.

In addition to the social context introduced above, Professor Christensen also calls attention to the need for observers to understand that there is a cultural context to which they should draw their attention as well. She points out that understanding the differences between the context in which Native American children find themselves may be as simple as understanding the dichotomy between the world views of Native Americans and non-Indians. Native American children live in the linear world of the non-Indian and this is in conflict with the holistic world of Native people. This conflict is viewed as a major contributor to the academic issues faced by Native American children in American schools. This may be exacerbated by the large number of Native American tribes/nations that continue to maintain their own cultures and languages. That is to say, in addition to the differences Native American children find within the majority population, they also find differences among themselves. This is supported in another critique of the contexts in which research and evaluation focusing on Native Americans occur (Fleming, 1992).

Professor Christensen also gives attention to curriculum delivery models that will enhance learning opportunities for Native American children, strategies that focus to some extent on demonstrating respect for the children and their cultural grounding. She also refers to the utility of role modeling in schools exemplifying these strategies by describing a teacher whose success is credited to his ability to create a bond with his students.

What do these concerns have to do with evaluation? I hope the answer to this question is obvious. If it isn't yet, then critical attention to Dr. Jolly's paper should bring it into better focus. This paper focuses on developing an understanding of cultural context, similar to the conditions

Christensen listed as leading to the existence of the so-called achievement gap. We probably ought to call the discrepancy in scores for one race/ethnicity as opposed to another a failure on the part of the institutions charged with the responsibility to serve all students equitably.

Dr. Jolly stated that in the discussion of a cultural context for educational evaluation, “we are not entering new territory.” It is not difficult to find agreement here. I was asked recently by an undergraduate student in our teacher preparation program how much time should be devoted to teaching about diversity in the classroom. I told her that *all* her time should be spent in such endeavors. There is a diversity of ethnicity, race, custom, tradition, music, dance, ways of knowing and yes, culture. To be American is to be diverse. This is the American context. Unfortunately, we fail to exhibit our understanding of this diversity in certain places, but the one place we should not fail is in school and when assessing what students do in school.

Americans are accustomed to working across diverse cultural constructs. It is just that the diversity with which white Americans are most accustomed and what they understand most is the diversity found in European-American cultures. What they consider to be different is Native American cultures and those of other minority populations in this country.

Dr. Jolly, like Professor Christensen, describes conditions that are important in knowing about Native American people. It is, of course, important that evaluators, teachers and others understand the contexts in which Native American children are situated, as was already pointed out by Christensen. However, we have to be careful about this. For example, Jolly lists poverty, but while it might seem to be true, not all Native American people are poor. He describes a high growth rate of our population, yet not all Native American families are exceptionally large. He describes other demographic characteristics as well, but one must be careful to understand that the children in American classrooms are not statistics. They are individuals and deserve to be treated as such. Inadvertent stereotyping is a serious problem.

Concerns raised in the discussion among the workshop participants centered around methodologies used by evaluators for collecting data, how judgments are made and what cultural understanding contributes to the conclusions reached. Questions were related to how one knows if a relationship actually exists between the Native American learner and the teaching method utilized. Is it really clear that there is an interface between the learner and the teacher? Are they talking the same language but engaging in the concepts with different imagery? Is the context in which things are being done perceived in the same way by both evaluators and subjects? These are questions that must be considered when making judgments about the performance of children in any area of learning. Evaluators need to have cultural understanding to be intellectually prepared to deduce the true meaning of the performance that is documented.

At the same time, there are questions about whether the effect of evaluation ought to be judgment at all. The discussion suggested that when a child sits down for a discussion about his or her performance in Native American cultures, what transpires is not judgment but rather instruction on how to turn a weakness into a strength. It is a way to help the child grow. The act of making judgments, it was suggested, is perhaps the wrong objective. Instead, evaluation should help make positive changes in the direction undertaken.

It appears that the latter recommendation suggests that all evaluation should be formative in nature. Indeed, it is the attitude taken by many evaluators that their mission is to help a program improve. This means, for example, that they would seek to identify ways in which individual

student performance might improve, instead of merely telling the program staff that the student's performance is deficient. This is desirable without a question, but it was also suggested that sometimes summative evaluations about a program's effectiveness should be made. For example, there are instances when one wants to know if, at the end of an intervention, the desired results emerged.

This, then, is the challenge confronted by evaluators. They need to be cognizant of the context in which teachers must educate and take into account the issues that have an effect on the achievement of some children, yet they cannot let the school and its teachers "off the hook" by providing them with an excuse for the poor performance in their institutions. Also, they cannot stereotype Native American children in their zeal to "understand." Giving educational programs excuses for not providing the best services for Native American children does no one any good. Instead we must advocate for appropriate solutions for poor performance wherever it occurs.

Some readers may be familiar with a book called *A Framework for Understanding Poverty* by Ruby Payne (1998). I think it is unfortunate that some faculty in teacher preparation programs have endorsed this book and offer it as required reading. My personal assessment of the book is that it does little more than stereotype people in poverty and give rich white people the illusion that they understand those who are impoverished. In my opinion, it is a primer for snobbery and makes those who are not forced to live in the worst possible human conditions grateful for their privileges. We have to be careful that we don't follow the same path in our quest to find better ways to evaluate programs that address the academic performance by children of poverty. We have to avoid allowing children to be stereotyped and should put the onus on the programs serving these children to do a better job. We also must educate our politicians who sit on thrones of power, offer undocumented criticisms of schools and put forth ill-conceived policies intended to punish those who don't perform according to their weak measures. Instead, they should give them resources. Resources such as teachers who are prepared to confront the various contexts of education.

I criticized a regional university in Oklahoma a number of years ago for its lack of attention to the conditions that existed in its area, *its* context. I told the dean that the institution had existed for approximately 100 years and had delivered a teacher education program for all those years in an area that was documented as being one of the most poverty-stricken areas of the country and that also had one of the largest populations of Native American people in the country. The teacher preparation program had never taken note of its own context sufficiently to address it in course structures. In spite of the fact that it prepared teachers who, for the most part, would never leave that area, the university never offered a class devoted to the preparation of teachers who would be asked daily to meet the challenges presented by poverty and diverse languages and cultures. For all those years, the program missed the opportunity to give American schools these human resources.

Who, or what, are we evaluating? Are we evaluating the students or the programs intended to serve their educational needs? The answer should be no mystery. We are evaluating the educational programs. Should we take into account the context within which the educational programs are delivered? Of course. That context includes the economic conditions from which the students emerge, the cultural milieu, the geography and the relative mobility of students, among others. Should we take into account the diversity of resources available to American schools or lack of such resources? Certainly we should. Should we reward schools merely for their students' high performance on test scores? Certainly not. That serves to punish certain schools and

teachers for their lack of resources and for the school's perceived failure even when there may be successes such as Dr. Bobby Wright's successful math classes, as cited by Professor Christensen.

I think the message given by these two papers is that we must pay attention to the diversity presented, but not by punishing or criticizing those who are being served and not by providing the institutions with excuses for their poor performance. Instead, we need to find ways to *help institutions to do a better job* of serving the American children in our schools. Some of these ways might be similar to those described by Professor Christensen. At the same time, it is important to point out that it is a disservice to always link Native American children with poverty. Although many Native American children are victims of poverty, not *all* are, and if they have difficulties in school, their problems may be linked to culture.

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SESSION 2: Resource Organizations and Programs

Representatives from federal agencies and national associations gave informal presentations and provided resource materials on their educational research and evaluation activities that involve Native Americans.

Following are brief descriptions of the work performed by these agencies and national associations. The representatives can be contacted directly for further information.

Federal Agencies:

U.S. Department of Education
Office of Indian Education (OIE)
Contact: Victoria Vasques, Director
(202) 260-3774

OIE's mission is to support the efforts of local educational agencies, American Indian tribes and organizations, postsecondary institutions and other entities to meet the educational and culturally related academic needs of American Indian and Alaska Native students. Its programs include formula grants and discretionary grants to Native American organizations and school districts. Over the last few years, OIE, the Bureau of Indian Affairs and the Office of Educational Research and Improvement (now known as the Institute of Education Sciences) have been developing an American Indian and Alaska Native Education Research Agenda that grew out of Executive Order 13096, signed by former President Clinton in August 1998.

U.S. Department of Education
Institute of Education Sciences (IES)
(formerly Office of Educational Research and Improvement (OERI))
Contact: Karen Suagee
(202) 219-2244

IES compiles statistics, develops products and funds research, evaluations and wide dissemination activities in areas of demonstrated national need. Working with its contractors and grantees, IES provides evidence-based guidance to decision makers on matters related to teaching and learning. Information about the American Indian and Alaska Native Education Research Agenda activities and resources on educational research and development can be found on the website, www.Indianeduresearch.net.

Bureau of Indian Affairs (BIA)
Office of Indian Education Programs (OIEP)
Contact: Pat Abeyta
Center for School Improvement
(505) 248-7526

OIEP is responsible for the management of all BIA education functions including the formation of policies and procedures, supervision of all program activities and the approval of the expenditure of funds. In 2001, there were 65 elementary and secondary schools operated by the BIA and 120 elementary and secondary schools funded by the BIA that tribes operate under contracts or grants. These 185 schools are located on 63 reservations in 23 states. The Center for School Improvement assists schools in gathering and using data about their school-wide programs and maintains a database for that purpose.

National Institutes of Health (NIH)
National Institute of General Medical Sciences
Minority Opportunities in Research (MORE)
Contact: Clifton Poodry, Director
MORE
(301) 594-3900

The National Institute of General Medical Sciences is one of 26 institutes and centers at the NIH. The Division of Minority Opportunities in Research administers research and research training programs aimed at increasing the number of minority biomedical scientists. Support is available at the undergraduate, graduate, postdoctoral and faculty level, as well as for education and research infrastructure improvements. Tribal colleges are eligible for these programs.

White House Initiative on Tribal Colleges and Universities (WHITCU)
Contact: Pamela DeRensis, Deputy Director
(202) 205-2528

As implemented by Executive Order 13270, WHITCU ensures that tribal colleges are fully recognized and have full access to federal programs benefiting other higher education institutions. In July 2002, President Bush appointed 13 members to serve on the President's Board of Advisors on Tribal Colleges and Universities. The Board consists of tribal college presidents, educators, business leaders and public servants. They will provide advice regarding the progress made by federal agencies toward fulfilling the purposes and objectives of the Executive Order, and recommendations to the President through the Secretary of Education on the ways the federal government can help tribal colleges.

National Organizations:

American Indian Science and Engineering Society (AISES)
Contact: Everett Chavez
(505) 765-1052

AISES was established in 1977 with the idea of providing financial opportunities to Native American students to pursue careers in science, engineering and technology. Soliciting partnerships and funding support from corporations and federal agencies remains a core function of the organization. AISES' ultimate goal is to be a catalyst for the advancement of American Indians and Native Alaskans as they seek to become self-reliant members of society. AISES has developed career services, K-12 programs, internships and scholarships for higher education. In addition to a Board of Directors and an advisory board, AISES has a Council of Elders who share their wisdom and guidance with AISES students and with the organization as a whole.

Society for the Advancement of Chicanos and Native Americans in Science (SACNAS)
Contact: Marigold Linton
(785) 864-4904

Founded in 1973, SACNAS' current membership is 28% Native American. The organization's purpose is to improve and expand opportunities for minorities in the scientific workforce and academia; mentor college students within science, mathematics and engineering; and support quality pre-college science education. The annual National Conference and K-12 Teacher

Workshops, summer research opportunities, E-mentoring program and online internship/job placement resources are tools that help a diverse community of undergraduate and graduate students, professors, administrators and K-12 educators achieve expertise within their disciplines. Federal agencies such as the National Institutes of Health and the National Science Foundation provide generous grant support.

American Indian Higher Education Consortium (AIHEC)
Contact: Susan Faircloth
Director, Policy Analysis and Research
(703) 838-0400, ext. 121

AIHEC was founded in 1972 by the presidents of the nation's first six tribal colleges, as an informal collaboration among member colleges. AIHEC has grown to represent 34 colleges in 12 states and one Canadian institution serving approximately 30,000 full- and part-time students. AIHEC's mission statement identifies five objectives: maintain high standards of quality in American Indian education; support the development of new tribally controlled colleges and universities (TCUs); promote and assist in the development of legislation to support American Indian higher education; provide technical assistance to member institutions; and promote public and private opportunities for TCUs in the areas of science and information technology, agriculture and natural resources use, Pre-K through 12 linkages, international outreach and leadership development.

SESSION 3: Education/Training Opportunities for Native American Evaluators

Session Chair:

Clifton Poodry
Director
Minority Opportunities in Research
National Institute of General Medical Sciences
National Institutes of Health

Presenters:

Christine Chee
Graduate Student
Relevance of Culture in Evaluation Workshop
Arizona State University

David Beaulieu
Professor
Department of Education Policy and Community Studies
University of Wisconsin, Milwaukee

Discussant:

Craig Love
Senior Study Director
Westat

Guiding Questions:

- What mechanisms are available to identify the current population of Native American evaluators?
- Does this population have specific education/training needs? If so, how do we meet them? The discussion will highlight current training activities and how to build capacity of Native American evaluators within the education community.

Papers/Presentations

The Relevance of Culture in Evaluation: Workshops I & II

Christine Chee

Introduction

Ya'at'eh wha'asiní. Shí éí Christine Chee yinishyé. Diné bikayád55' naashá. Nasht'ézhí Tábaahí shlí dóó Tsénjíkiní éí báshíshchíín. The translation of this statement in English is "My name is Christine Chee. I am a member of the Diné Nation, also known as the Navajo Nation. My maternal clan is Zuni Edgewater and my paternal clan is Cliff Dweller People. This is my identity."

I was asked to participate in the National Science Foundation's meeting of Native American evaluators and to write this paper as a result of my involvement with the Relevance of Culture in Evaluation Workshop (RCEW) that was developed by Dr. Stafford Hood at Arizona State University. This workshop is funded by the National Science Foundation Directorate for Education and Human Resources, Division of Research, Evaluation and Communication (REC). RCEW was designed and implemented to enable minority and female teachers in schools with a predominantly minority student enrollment to become better consumers of program evaluation findings and develop a better understanding of the importance of culture in evaluation. RCEW also places a high priority on the inclusion of all teachers who teach in schools with a significant number of Native American students.

Culture, Teachers and Program Evaluation

Most evaluations of educational programs do not seriously make adaptations that include cultural background and/or context in their design, implementation, analyses or recommendations. This is particularly true for evaluations of programs that serve diverse and/or poor communities. The changing demographics in our schools and society require that immediate and meaningful steps be taken to address the need for culturally responsive evaluators.

Teachers play a core and vital role in the educational and instructional process and in any effort to reform our schools. However, not enough attention has been given to the important role teachers must play in the evaluation of educational programs and how participants can receive the optimum benefits of evaluative information to improve their practice. Too often teachers consider themselves as conduits for the collection of evaluation data and not as consumers who can make use of the information. One reason for this limited view may be teachers' lack of knowledge about the multiple roles, approaches and utility of evaluation for their classrooms (RCEW, 2001).

Purpose of Relevance of Culture in Evaluation Workshops

Efforts such as RCEW are designed to serve as vehicles to encourage participants to make changes and/or refine evaluative practices and to pursue advanced training in program evaluation. This paper describes both the pilot RCEW (January 3, 2001) and RCEW II (December 16 and 17, 2001) that were held as pre-conference workshops at the annual national conference on *Relevance of Assessment and Culture in Evaluation* (RACE), sponsored by the College of Education at Arizona State University, Tempe, Arizona. The purpose of the RACE conference is to "initiate dialogue that increases our understanding of culture's relevance in standardized achievement tests, psychological assessments, instruction and program evaluation" (RCEW, 2001). The RCEW organizer, Stafford Hood, is also the founding co-director of RACE.

Participants in the workshops were teachers in the Phoenix area and from the Navajo Nation. Most participants were minority and/or female teachers with three to five years of teaching experience in classrooms with a high percentage of minority students. Principals and/or district administrators nominated the prospective participants. Selected participants received Arizona State University continuing education credits for both the workshop and the annual national RACE conference, at which their attendance was required. In some cases the funds from an NSF grant covered participants' costs for registration at the workshops and conference, meals, materials and lodging. Each participant received a packet of readings that had been recommended by the evaluation consultants as well as the book, *Evaluating School Programs* (Sanders, 2000). The workshops highlighted:

- the role and importance of program evaluation in school settings;
- major evaluation theories/approaches that have defined the field of educational evaluation;
- examples of emerging evaluation theories/approaches that use cultural context as an important factor; and,
- culturally responsive approaches in the design and implementation of program evaluations.

The workshops were designed to entice teachers to participate more willingly and effectively in their school's and district's evaluation efforts and to help them become better consumers of evaluation findings. These workshops were also designed to provide the participants with increased awareness of program evaluation, familiarize the teachers with the relevance of culture in program evaluation research and practice and to appreciate evaluation's importance for improving the educational process and success of minority students in urban and rural settings.

The pilot RCEW was held on January 3, 2001. It was organized and facilitated collaboratively by five minority and/or female evaluators with extensive experience in the evaluation of educational and other programs in culturally diverse settings. The evaluators presented papers and mentored the participants during the conference. The evaluators were:

- Mr. Juan Martinez, Manager of Research and Evaluation, Court Services Division, State Court Administration for the State of Minnesota and Consultant to the Institute for Cultural Affairs (Phoenix, AZ);
- Dr. Floraline Stevens, Floraline Stevens and Associates, retired from the Los Angeles Unified School District as the Director of Research and Evaluation;
- Dr. Henry Frierson, Professor of Educational Psychology, Measurement and Evaluation, University of North Carolina at Chapel Hill, and Director of the Research Education Support Program;
- Dr. Michael Yellow Bird, a member of the Sahnish and Hidatsa First Nations and Associate Professor in the School of Social Work at Arizona State University; and
- Dr. Jennifer Greene, Professor of Educational Psychology, University of Illinois at Champaign-Urbana, and a specialist in educational and social program evaluation.

A total of 22 teachers attended the pilot RCEW. This group was comprised of 19 females and three males. There were 9 African Americans, 6 Hispanics, 4 Native Americans (all Navajo), 2 Whites and 1 Asian American.

After the pilot workshop, teachers from a reservation school in the area invited participants to visit their school. On April 19, 2001, the workshop organizer, two workshop participants (an African American female English teacher from South Mountain High School in Phoenix and a Navajo female teacher from Dzil Libei Elementary School on the Navajo Reservation) and the author visited the Little Singer Community School near Lupe, Arizona. The Little Singer teachers coordinated the preparation of traditional Navajo foods (a three-day process for certain foods) as a vehicle to provide a culturally relevant experience for the visitors, but more importantly to provide an example of how curriculum and instruction could be culturally grounded but still linked to important learning outcomes. The classroom teachers talked with the visitors about how they facilitate lessons in their classrooms that incorporate educational standards for the state of Arizona and Navajo culture. One of the most intriguing discussions was held at the end of the classroom tour when the Little Singer teachers provided the visitors with a presentation entitled: *A Philosophy of Education and Culturally Responsive Evaluation: A Navajo Perspective*.

At a follow-up half-day workshop meeting with RCEW pilot participants on May 11, 2001, the participants discussed what they had learned from the RCEW experience and what they had done since the January workshop that might have been stimulated by the workshop and/or conference.

All of the pilot participants who attended the follow-up meeting reported that the workshop had had a profound and positive impact on them, personally and professionally. The majority indicated that they had made use of the information or experiences from the RCEW workshop and the RACE conference. Several teachers who attended the workshop indicated they had met with their principals about what they had learned and volunteered to make formal presentations about the workshop to teachers at their schools. One teacher had recommended and implemented an effort at her school to provide all written correspondence to parents in both English and Spanish. This led directly to the largest number of Hispanic parents attending a major parent activity at the school. With regard to the impact that the workshop had on the participants, their own words provide the most compelling evaluation of the experience. These few statements provide examples of the sentiments shared by participants:

> "This workshop has been an eye opener as to what is being done in integrating the awareness of culture and its influence in testing."
>
> "I am extremely interested in learning more specifically about what has been learned about the impact of culture on evaluation."
>
> "This has been very illuminating. I'm eager for more information."
>
> "I feel so privileged to be a part of this wonderful learning experience."
>
> "This has been an enlightening and awesome experience."
>
> "I came here without knowledge and opinion and I leave here with tools, the right questions to ask and deeper thought."
>
> "I know I've been changed. I cannot, will not remain the same in thought, action or intent. I have you and this workshop to thank for that. Kudos to you for allowing me to further develop and evolve into an empowered social change agent."

One major outcome that may have been partly influenced by the participants' involvement in the workshop is that a number of them later reported that they had been admitted into graduate programs after the workshop. Two of the participants are now pursuing doctoral studies in education and two more are pursuing Master's degrees in education. Additionally, two of the participants attended and delivered presentations at the annual meeting of the American Evaluation Association (AEA) in St. Louis (November 2001) as part of a panel on the RCEW. As members of this panel, they shared their experiences as participants in the first of these workshops. Additional and equally compelling outcomes are the relationships that were established among the participants. For example, one African American participant (now in a School Psychology Doctoral program) has been volunteering her time to work with one of the Navajo participants at the Little Singer Community School.

From the pilot workshop to the planning phase of RCEW II, refinements were made to the workshop's structure and implementation based on the lessons that were learned. For instance, pilot RCEW participants indicated that there was an insufficient amount of time to digest the workshop's information and ideas in one day. Therefore, RCEW was expanded from 1 day to 1.5 days in RCEW II. All of the participants' comments and suggestions from pilot RCEW were used to refine RCEW II.

RCEW II was held December 17 and 18, 2001. Three evaluators from the pilot (Mr. Juan Martinez, Dr. Floraline Stevens and Dr. Henry Frierson) and three additional evaluators presented papers and mentored participants:

- Dr. Kalvin White, a member of the Navajo Nation and the Interim Principal Investigator for the Navajo Nation Rural Systemic Initiative, as well as the statistician/demographer for the project;
- Dr. Terry Denny, Professor Emeritus of Educational Psychology and Elementary Education, University of Illinois at Urbana-Champaign;
- Dr. Corrine Glesne, Associate Professor of Education, University of Vermont, specialist in qualitative research.

Fifteen teachers—all female—were selected to participate in the second workshop. There were 4 African Americans, 4 Whites, 3 Hispanics, 2 Native Americans (1 Navajo and 1 Hopi), 1 Asian American and 1 Black from Britain. In addition to these participants, teachers from the pilot workshop also attended to serve as peer mentors. The evaluators provided insightful presentations that resulted in stimulating discussions and dialogue throughout both workshops.

The RCEW II participants held a follow-up meeting on May 17, 2002. The participants' discussions and evaluative feedback is currently being synthesized and therefore will not be reported in this paper.

A professional film crew videotaped the workshops and interviews with the evaluators. The raw footage was edited to produce a two-hour videotape. An accompanying CD includes excerpts of the interviews and workshop materials. The two-hour videotape and CD are intended for use in future professional development training workshops for teachers.

Additional products from the workshops include the RCEW listserv and website (http://rceworkshop.asu.edu). The listserv includes the participants and evaluators of both workshops, as well as other evaluation specialists who are actively involved in this effort. The website includes a description of the workshop, materials from the pilot workshop and video clips from the interviews with the evaluators. The website will continue to be developed for the purpose of exploring its utility for possible use as a distance-learning vehicle for the workshop.

Summary

RCEW I and II provided a select group of teachers with an increased awareness and basic knowledge of program evaluation, as well as the importance of culture in evaluation practice. By all accounts, both the participants and the evaluators believe that something positive has happened in this endeavor and have high hopes for its future. It is expected that efforts such as this will serve as a vehicle to encourage some of the participants to make positive changes in their classrooms, schools and districts. We also hope that some participants may contribute to ongoing efforts to refine evaluative practice and possibly pursue advanced training in program evaluation.

A Personal Note

For the author, it is important to note that there was a Native American evaluator, more than one Native American participant and one Native American graduate assistant who has participated in every stage in the development and implementation of this project.

I feel very honored to have been a part of this endeavor. I was initially involved in this project while pursuing my degree in the Master of Counseling program (recently I was admitted to the doctoral program in Counseling Psychology). I have been a part of the project from the very beginning. Not only did I learn a great deal from this experience, but it also motivated me to learn more about program evaluation. Since my involvement in this project, I have taken a graduate course in program evaluation that required me to design and implement a basic evaluation of an after-school program. I continue to be excited and committed to this project. I have volunteered my services on numerous occasions when funding was not available, and will continue to do so if needed. I believe we are doing important work that must continue.

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Education/Training Opportunities for Native American Evaluators
David Beaulieu

Introduction

In the early 1990s, following The Indian Nations at Risk Task Force, the Bureau of Indian Affairs (BIA) Education Division initiated a system-wide evaluation and monitoring program that included every tribal and federally operated school as well as the dormitories, the education agencies and the central office within the BIA education system.

Under the leadership of Sandra Fox, many teams of approximately four individuals each conducted evaluations of each school within the system. The evaluators included a significant number of Indian teachers, administrators and other education personnel along with academics and others known to have unique and necessary perspectives and views. They were the master teachers and educators working in Indian education at the time.

The process utilized the "effective schools" criteria that had been modified by a team of Indian educators so that the criteria reflected the local context of Indian schools and the experience of the evaluation process over time. The evaluation process was very similar to the approach utilized by the North Central Accrediting Association's Commission on Institutions of Higher Education. Strengths and weaknesses were identified in each of the areas and professional advice was offered. A very strong reference to the mission and purposes of the school and the school's organization to accomplish those purposes, along with determining the extent of the accomplishment, created the focus for utilizing the modified effective schools criteria to guide the evaluation team's review.

Each team was under the leadership of a team leader who was responsible for planning and conducting the visit and writing the required report. The report was shared with the school and with the BIA. At the end of a cycle of visits, the team leaders debriefed about the process, the criteria and what was learned.

The evaluation was based upon a continuous improvement model for school reform. Schools were asked to utilize the recommendations and professional advice of the report as a basis upon which to develop a school improvement plan. The author believes that every school in the system was visited at least twice. In the mid-1990s the evaluation and monitoring system was modified so that a lead evaluator was assigned to each school. That individual coordinated consultation with the school in areas of identified need.

There are components to this system of evaluation that have very significant potential for improvement of schools educating American Indian students, and from which we may begin to discuss the development of effective training programs for evaluators.

1. An evaluation was developed for each school that focused on criteria known to be important for schools that work. The criteria were modified to suit the local context of Indian education within the schools that were being evaluated and an evaluation report was developed from which the school was able to create a comprehensive school improvement plan. The evaluation at the school level determined a number of best practices in teaching and learning, planning and development and programmatic activities supportive of the instructional mission of the school, as well as what needed to be focused on as the school sought improvement.

2. Each school had the opportunity to witness the evaluation process and to utilize the modified criteria as a guide to their improvement work within the school. Its use provided a framework for the development of an improvement culture within the schools.
3. The schools provided significant numbers of teachers, principals and educators who were utilized as evaluators. The core of evaluators was almost entirely American Indian. All Indian and non-Indian evaluators were recognized for their particular knowledge and experience. Yet their involvement in the process over time and the knowledge gained by individual evaluators who returned to their school communities was important to their work within the school. Knowledge of evaluation and growth of the individual evaluator's understanding of his or her own work and the process of improvement were enhanced.

If it had been the intent of this particular evaluation and monitoring process to develop a training program for American Indian evaluators, it would have been fairly easy to identify not only the population of evaluators but to also identify and categorize the knowledge and skills required and gained through the process. Any successful training program for American Indian evaluators must include knowledge growth and must be directly connected to an ongoing evaluation process.

Impact of High Staff Turnover Rates

The evaluation reports developed as a part of the evaluation and monitoring process also were used to illustrate larger policy questions or common issues related to improvement that needed to be addressed system wide. For example, the process identified that one of the single most important factors in school improvement was continuity of educational leadership at a school. Those schools that were doing well had principals with significant longevity at their schools and whose orientation toward development was informed by the evaluation process.

When the top principals within the BIA system who were identified as having high performing schools were asked several years later what made a successful school, they recounted the effective schools criteria that were modified and adopted by the evaluation and monitoring process to the local context. The information that schools that were successful had long-term leadership focused upon improvement, though essentially a common sense understanding, revealed upon analysis that there existed significant vacancy and high turnover rates among principals and indeed for all education professionals within schools that have predominantly American Indian student populations.

There are obvious issues associated with the constant need for schools to search for personnel, and there are significant implications related to high rates of education staff turnover on the ability of schools to accomplish their primary instructional purposes much less maintain a sustained effort at school improvement.

What the situation also suggests is that our basic approach to school improvement and reform is inappropriate for the task at hand. Since we rely upon a model that sees development as a continuous long-term process that is the result of appropriate informed professional development of the staff, including its organization to accomplish its purposes, consistently high turnover rates significantly mitigate the potential of our principal model for school improvement and reform.

Schools as social organizations focused on learning must become learning organizations if they are to improve the quality and effectiveness of education for American Indian students. Professional development focused on individuals and the group as a whole including organizational, administrative and governance changes supportive of the school's purposes and

its goals for improvement is the primary tool available to improve schools. Appropriate, meaningful and effective evaluation including research directly connected to schools educating American Indians is the most effective way for new knowledge growth and must become the principal input for professional development.

Very high teacher and education staff turnover rates including that of educational leadership as well as high vacancy rates in positions critical to the educational mission of the school, not only hamper schools with predominantly Indian student populations in accomplishing their instructional purposes but also hamper the school's ability to improve or retain any developments that have been accomplished. One consequence of high staff turnover rates is that schools are required to focus primarily on induction and orientation rather then continuous improvement based upon authentic and informed evaluation and assessment activities that can inform an improvement process. We may not be able to ever fully rely upon our existing model for school reform and improvement since that model is based upon certain assumptions that are largely not true for schools with predominantly American Indian students (Beaulieu, 2000).

Efforts to Stabilize and Mitigate the Effects of High Education Staff Turnover Rates

Informed and effective evaluation is the basis for all significant change and improvement at all levels of the education process. However, no matter how informed and effective it is, evaluation may have little utility if we are unable to stabilize the high professional staff turnover and/or mitigate its effects. Two larger efforts, the Indian professional development program of the U.S. Department of Education, and the evaluation and monitoring approach of the BIA now being carried out by the National Indian School Boards Association through its effort Creating Sacred Places for Children and the BIA through Building Effective Schools Together (BEST) not only provide an opportunity for continuing the work but also an opportunity for stabilizing and mitigating the effects of high professional staff turnover (Creating Sacred Places for Children).

Indian Teacher and Administrator Development Program

The high turnover rate situation provided the impetus for supporting the creation of the American Indian Teacher Training Program and the American Indian leadership pre-service and in-service programs. These programs support the training of local American Indian people at the undergraduate and graduate level who are required to work in schools with predominantly American Indian student populations upon graduation.

These programs are more than an effort to increase the numbers of American Indians in the education professions. Through the training of local American Indian people and requiring that they work in schools with predominantly American Indian populations, the focus of the program is on attempting to create a local group of education professionals who are already aware of the culture and society of the students' communities and are more likely to stay employed at the school over time if they are provided professional training.

The teacher-training program also has a required third year mentoring component where the teacher training institution will stay connected with the student and provide guidance and mentoring during the American Indian teacher's first year. Given the typical relationships established between a school and a teacher training institution such as student teaching, teacher training and placement, mentorship and the potential for long-term professional relationships of teacher graduates with their teacher training institution, a goal of the program is also to shorten

the “distance” between the professional training, consultation, public service and research purposes of Colleges of Education and schools educating American Indian students within their service region (Office of Indian Education).

Evaluation System Strategies

The issue with high professional staff turnover rates and school reform concerns the retention of knowledge and experience within the social organization of the school and school system.

Individuals working within schools educating American Indian students have created some of the most innovative and effective education practices. Though these practices have been increasingly shared and have been incorporated into other schools, knowledge gained must be retained within the social organization of the school among the teachers and all staff organized to fulfill the instructional mission of the school. But when up to 40% of the staff at American Indian schools leave each and every year, the school’s organization for learning is severely compromised, as is its capacity to improve.

A significant aspect of our strategy must be to focus not only on the improvement of the knowledge and experience that exists within the schools and school systems that are responsible for the education of American Indian students, but to also focus on its retention within the organization of the school over time. An endogenous evaluation system connected to schools with predominantly American Indian student populations holds very significant promise for improving American Indian schools while mitigating somewhat the effects of high staff turnover. Identifying the master teachers and education professionals within a region or who are nationally connected to schools educating predominantly American Indian student populations and involving them in a systematic evaluation program provides a significant opportunity to grow new knowledge and retain it system wide. There is also an opportunity to begin to shift educational leadership toward those teachers who stay within their schools or within the system. The potential to shift leadership toward master teachers who stay in their school communities may also lessen the impact of administrative leadership changes upon school improvement.

An evaluation system directly connected to the schools, that may also bring together programs that train local American Indian people to be teachers and administrators and that maintains long-term relationships with these individuals and the schools in which they work, is a significant strategy. All aspects of such a system must significantly shorten the “distance” between the development of new knowledge and its application.

We must stabilize staffing within schools by lessening the turnover rates through focusing on the development of local community members to become teachers and administrators, and we must increase the effectiveness of induction and mentoring activities for new staff. We must conceive of other models for school governance and management that focuses on school improvement so that the effect of administrator turnover and vacancy is minimized. The current administrative and management models, in light of the impact of the turnover of education leadership, may not be the best long-term approach.

We must also develop and maintain an endogenous peer-based regional and/or national system of evaluation related to American Indian schools that focuses on the creation and identification of new knowledge, innovative practices and models for school-wide improvement among the schools that educate predominantly American Indian student populations. Aside from its obvious

effect on improvement, such a system provides the necessary places where new knowledge can be retained. The National Indian School Board Association (NISBA) is currently modeling such an effort through its Creating Sacred Places for Children initiative.

Conclusions

In considering the guiding questions for this session, I suggest the following points.

What mechanisms are available to identify the current population of Native American evaluators?

There exists a significant pool of American Indian evaluators within the educational personnel at those schools educating American Indians, as well as a diverse group of individuals who have been involved and/or are currently involved in school evaluation and monitoring work.

In my view, it is not only easier, but also far more effective to train evaluators who are already intimately familiar with the local community culture and school context about evaluation than it is to train those familiar with evaluation about the local community culture and school context. Consequently, the current population of American Indian evaluators can be readily described and identified.

Similarly, it is also easier and more effective to train individuals who know the local culture and nature of the children and certify them as teachers than to train certified teachers about the local culture and children if the goal of schools is to create appropriate and effective teaching and learning strategies and education environments for the children within the schools.

In either case, the translation process is an intimate and negotiated process that can be taught particularly if connected to an ongoing improvement effort. A pool of American Indian teachers, administrators and education paraprofessionals can readily be identified. There also exist 22 American Indian teacher-training projects and approximately 11 Indian Administrator Training programs, including a program focused on the in-service needs of BIA school administrators.

Does this population have specific education needs? If so, how do we meet them and how should we build capacity for Native American evaluators within the education community?

Any effective training program for evaluators, in my view, must be connected to school and system-wide improvement. The content for the training must emerge from the system based upon the assessed needs of the school and the improvement desired. The training process should be embedded within the evaluation process.

Because it is the nature of effective evaluation to provide significant information about children's learning and schools that is critical to the improvement process, the training of evaluators should incorporate how evaluation plays a role in improvement and how incorporating local context is critical to the improvement process of schools educating American Indian children.

A program to train evaluators who are familiar with the local community culture and the school would necessarily focus on a number of aspects of evaluation.

1. First, there is a need to provide training in the available evaluation strategies and processes of all and/or particular aspects of the educational processes of the school.

2. Secondly, and directly connected to the first, there is a need to provide training in strategies for how to incorporate the local context into any particular evaluation instrument, strategy or process. The art of translation of existing criteria, evaluation instruments and the like are critical skills and must necessarily be taught and learned by doing.
3. The utilization of such modified instruments and criteria in an evaluation process produces information and knowledge that needs to be identified and recognized. This can also be taught and learned by doing. This latter point regarding recognition and interpretation of critical new information, through dependent upon the other points, is in my view among the most critical aspects of the evaluation effort. The ability to identify, recognize and interpret information produced though evaluation is an important skill for evaluators. Many evaluators look for and see only the patterns that fit preconceived notions and perspectives rather than interpreting the information within the context of the school's mission and its local situation.
4. There are aspects of protocol and how to conduct evaluations of schools, internal group processes and other strategies for improving evaluation and its uses that are important to learn. Though there have been national and regional evaluation efforts related to schools with predominantly Indian populations in the past, there is a need to understand what the strengths and weaknesses of these efforts are in terms of how they are conducted and how school staff and board members perceive the process.
5. All evaluators, whether teachers or not, should be very familiar with assessment strategies for evaluating the educational progress of children and be able to interpret results, not only to determine how well the school is doing, but what the results indicate for improving instructional practice and responding to the needs of students.
6. Local teachers and educators have increasingly developed ready access to a growing body of information related to school improvement and evaluation. Evaluators must become familiar with the latest research and professional development materials available in a wide area of specialties while avoiding the tendency of becoming pitchmen for the latest ideas or fads. In many ways this material simply represents frameworks for what might be possible. Being able to modify and adapt even the latest of ideas no matter how innovative they may seem is a critical skill and disposition for evaluators.

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Discussion Highlights
Craig Love

Evaluations in Indian country are very complex. Modern knowledge and technology change at an ever-increasing rate, but they may or may not be effectuated in Native American communities. For this reason, and because of other specific cultural factors, there are many things that may need to be done differently in evaluations with Native Americans. We need techniques that accommodate these factors and create more appropriate evaluations for Native American communities.

There is an abundance of unique issues in Native American education. A large proportion of Indian children are school dropouts. One result is that a large segment of Indian youth are not getting the most basic education needed to survive economically in this country. This influences our evaluations because it results in a reduced number of educated Native Americans who have the potential to enter the pool of evaluators. This appears to be the common theme with our presenters, both of whom have suggested rather intriguing approaches to enhancing educational evaluation with a limited number of Native evaluators. Both have talked about teacher training in evaluation and about participant evaluations. They have proposed that teachers become part of the evaluation process. They provide examples of different kinds of training and the use of existing resources to conduct evaluations. Their ideas have offered a great start to enhancing evaluations in Native American education.

The two papers stimulated my thinking about the realities of implementing an evaluation in Native American educational settings. Dr. Beaulieu indicated that there is a pool of educated individuals living in Indian country, if you can just find them. They are sitting out there on reservations doing other things. I have seen this myself in many different Native American communities. Identifying them is not always easy nor are they always available. Nonetheless, they are a potential source of evaluators.

Ms. Chee has suggested the option of tapping the many Native teachers in Indian country and providing them with training to conduct evaluations. I think that using teachers offers a couple of distinct advantages. First, the Native teachers can offer insights into some of the cultural issues that influence the processes and outcomes addressed in evaluations. They can help identify some of the important issues facing teachers, the very consumer group for which the education evaluators are working. The teaching community is the primary consumer of educational evaluation. The teachers/consumers can help operationalize the most appropriate questions and implement techniques that will work in the community. Why not have them help design their own evaluations? Even though they are not necessarily trained in evaluation, they are able to help select and develop the most feasible evaluation methodology.

The second major advantage of using teachers in the evaluation process is that it creates a way for them to have ownership of the evaluation. Their input assures a greater probability that the evaluation results will be useful to teachers to improve instruction and the education process. This ideal evaluation strategy addresses a common question I hear evaluators ask, "What happens to the results after I've finished the evaluation?" The professionally trained evaluator in this model serves as a technical assistant, helping the teacher/consumer with the technical details required to get the evaluation done, conduct analyses and interpret the results.

This approach also allows the evaluation process and design to be responsive to the environment in which it is created. As an experienced evaluator, I advocate an ongoing, systematic and routine evaluation process that can provide trend data and monitor the indicators of progress toward the

school's goals. This is a routine part of the management process and, since it is created by the teachers, it has the capacity to guide individual teachers in achieving their own goals. The teachers can use the information because they have designed the questions. Because they are involved in the design and management of the evaluation, they are more invested in the results and understand better the implications of the information provided.

In discussing specific techniques, a question often raised is whether to use qualitative or quantitative methods in evaluating the Native American education processes. I have always found a blend of the two techniques to be the most effective approach in any evaluation. It is always valuable to have two parallel evaluations so that one can be used to inform the other. It helps to have descriptions of the program and circumstances that may help interpret the results of a given analysis. For example, in one plains Indian group, there was a situation in which 90-95% of their youth were completing school through the 8th grade but started dropping out at high rates during the 9th grade. By the 12th grade, only 15% of the students from the Indian community were graduating. Since one of the criteria in the evaluation of the program was high school graduation rates, this was a disturbing finding. All of my objective data did a fine job in showing the dropout rates. But it was hard to interpret because all indications suggested that these students thrived until the 9th grade. So I did the obvious thing and sat down with some of the students in the school system. We just chatted in a relaxed environment. This is a form of qualitative data that I was gathering.

It turned out that the tribal school went only to the 8th grade. Through the 8th grade, all of the students were Native Americans. Although not many of the teachers were Native American, the students were surrounded by elders and other tribal members throughout their first 8 years of school. The Native American students were leaders, experienced in sports and social activities, and successful academically. They received a lot of positive feedback and assurances about being Native American. Then the students started the 9th grade in a school located off the reservation. In that school, they were treated like misfits and outcasts. They were given messages about their perceived inferiority from their fellow students and teachers. The high school teachers told me that they set lower expectations for their Native American students.

Many students who had done well in earlier grades suddenly found themselves in special classes in high school. No wonder they dropped out! The Native American students' perception of the school was, "I just don't belong." These social variables were important to the evaluation because I was better able to discern what the data were saying. Without the qualitative data, I would not have had that understanding.

This leads me to another thought. Evaluators need to address the context in which the information is collected. The tribal context and its associated customs are important in most reservation settings. The evaluation should also consider the composition of urban Native American communities. The tribal environment of the community is important in understanding many dimensions of the context of the educational program. Many of these communities have yet to come to terms with fundamental issues that have been floating around Indian country for a hundred years. For example, how do you deal with mainstream society while remaining true to your family/tribe/community? Do you accommodate the modern society and adjust your life and beliefs to suit that situation? Yet another approach is to totally reject the mainstream society and try to hang onto the past and be consistent with the traditional Indian ways. This issue is constantly impinging on Indian societies and is one that each Indian youth has to face.

The question of defining one's Native identity is relevant to our topic because education is a potential key to resolving this issue. I encountered Native students at Brown University who were at the top of their class. However smart they were, few of them had dealt with the question of how they were going to reconcile their Western/European education with the beliefs and knowledge from their Native background. This is a question that their community members raised when the students returned to their home communities and a question with which they grapple throughout their academic career. Many of these students have faced derision when returning home from school and have seen their predecessors rejected by the very community that sent them to college because the community members believe "the Indian is educated out of them." In my opinion, the reality is that we have to deal with mainstream society. They won, you know, and they don't plan to ever go away. We have to find ways to survive as Native Americans in the midst of this pressure. My own bias is that we should develop ways of being true to our Native heritage and beliefs while consciously addressing the demands of the modern world. I think that our Native societies need to take responsibility for educating our children on how to deal with mainstream society.

I have a few suggestions based on these thoughts. Dr. Beaulieu's paper identified a major problem of teacher quality among Native American teachers. I have had a different experience with Native teachers. There are too few Native teachers working with Native students. In fact, I have been in many sites in which the teachers and school staff were nearly all non-Native. Many teachers are not from the community and do not know the culture, even after teaching in an Indian school for several years. I once observed a class that was supposed to be conducting a talking circle. The curriculum was based on a program developed on another reservation. The talking circle was not conducted in a circle, but in a regular classroom setup. No talking stick (a feather, etc.) was used. Instead, the teacher called on various students to talk about problems in their families. While Dr. Beaulieu did identify the need for proper training, I would go a bit further and suggest that we need to develop more Native teachers in all disciplines.

Dr. Beaulieu reported a 40% turnover rate among Native American teachers. One of the participants noted that that could mean that 60% didn't turnover. That is, it could be that 60% of the teacher corps is stable. Or it could mean that turnover is 20% per year and that there is no stability in the teaching staff. Or, according to the commentator, that figure could mean that there is a stable population of "ne'er do wells that hog the resources and upper positions."

According to the commentator, a high turnover rate would suggest that there are management and recruitment issues and that the problems lie in school supervision. Effective recruitment requires the development of good teachers from among the Native teacher pool. Good supervision allows teachers to be monitored on their own terms. A good way to develop a positive management strategy is to interview teachers who leave to ascertain why they leave. The findings could be used to enhance the selection process for new teachers and to identify administrative issues.

Dr. Beaulieu stated that, in fact, many teachers stay a couple of years and then leave. There is, indeed, a high turnover rate. A large number of teachers in Native schools turn over in any 5-year period. Dr. Beaulieu suggested that a significant number of teachers have little seniority. Very few teachers stay through retirement. However, that seems to be changing. Not counting Rosebud, the reservations are beginning to graduate 10-15 Native teachers every year. On reservations, the U.S. government is an important source of consistent employment. This may help keep more teachers for longer periods of time because teaching can provide a rare source of reliable income

for Natives in those communities. It goes beyond that though. Dr. Beaulieu expressed the feeling of being increasingly impressed by the impact teachers have on committee work in the schools. They help establish cultural activities, recreational functions and other things to help the students and community. The newer Native teachers seem to be more invested in providing services and being active in the school and community. They think about policies and procedures and work on committees to develop them. Although some teachers live separately from the community and don't participate in community activities, that number is decreasing. Living in segregated communities begins to break down with new Native teachers on the scene.

But this transformation is a long process. At this juncture, Dr. Beaulieu is interested in how teachers face the challenges of the system because the system changes slowly. There is a lot of professional socialization of Native teachers who come into the system. It is a question of how the Native teachers bring what they know about the students, culture and community into the professional teaching environment. The interesting question is how do they reconcile these competing perspectives in the community? This is similar to the identity question that was raised earlier in the session regarding student adaptation. The tough issue is how the Indian teacher balances the competing perspectives in the school setting.

Another participant commented that there was an issue about which the group hadn't talked much—the issue of culture itself. "Someone came up to me at one of our regional forums. He tugged my sleeve and asked, 'Do you want to know what is wrong with our educational system?' I replied, 'Yes, tell me.' 'The problem is Hollywood. We are different from our grandmothers. They were together, talking the language. Now if they are working they are 'gone.' The only model we have now is from Hollywood. That's how children learn about being Native American." One issue in school and education is congruence of the school system and curriculum with the culture. The education system is not necessarily in tune with the culture. In fact, there is a growing discontinuity in some places between young people and their parents—a significant discontinuity reflected in loss of language in the younger generation. The children have different perspectives about what they wish for their lives. Education and the media have instilled mainstream American values in identifying what is important. It defines what they want. We needn't think so much about having more Native American evaluators, but rather more Native American evaluation as Dr. Beaulieu proposes.

Modern evaluation requires sophisticated knowledge of statistics and research design. Developing capacity is a task that is quite varied from site to site. This suggests that the model of a team approach is optimal. In this approach, evaluation specialists can work with teachers and others to serve as consultants to the Native American communities and the teachers. This is a compromise to allow the teachers to have their own evaluation, but with the professional expertise offered by an evaluation consultant. That is, there may be an alternative to just turning out more Native American evaluators.

Another participant commented that evaluation can be conducted in a "co-equals" model. In one study that used this model, an assembled team of people conducted the evaluation. One person was good at drawing up surveys, another getting into the schools and another at getting access to data, one of the hardest things to do. The combined model worked.

However, it is important to note that effective evaluation hinges on respect. The presenter of the information must be respected by the recipient of the information. The concern is about the credibility of the presenter of the data. There is a sort of elitism in the community of evaluators.

Scientists see themselves as different from science educators. This is a real problem. Is a Ph.D. evaluator better able to present evaluation data than an evaluator who has a Master's? Better able to present than a teacher? And who gathers this information and writes the report? Who is going to say that these data are good?

Where do you draw evaluators from, and what do the qualifications have to be so that they respect the evaluation information that they are given? We haven't even talked about how high up on the credential ladder a person has to be. An elitist scientist may not approve of the qualifications of an evaluator and thus dismiss his or her findings. We need to think about that too. There may be teachers out there who can become evaluators, but what kind of credibility will they have? Will their findings be accepted? Will they get the respect that is needed? How do you use the teacher/evaluator who has the cultural competence yet not the evaluation credentials? They can come to an evaluation team that includes both credentialed individuals and Native American teachers. That is, they can use the "co-equal model."

Another participant commented that there is some concern that an individual can be trained out of his or her culture and lose his or her value as a Native American evaluator. The teachers themselves may not have the requisite knowledge to provide the cultural competence that is assumed in Dr.Beaulieu's model. Just being a Native teacher is not enough. How can you ensure that the teachers are not overly assimilated? We have made the assumption that evaluators from the community will conduct a culturally competent evaluation. This is an unresolved issue that needs to be studied.

SESSION 4: Developing, Maintaining and Expanding a Network of Native American Evaluators

Facilitators:

Tim Begaye
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Harvard Project on American Indian Economic Development

Joan LaFrance
Mekinak Consulting

Joan Esnayra
Program Officer
National Academies of Science

Breakout Groups/Guiding Questions:

1. **Training and Future Needs**
   Participants: Christine Chee, Pamela DeRensis, Marigold Linton, Grayson Noley, Floraline Stevens

   - As the demand for evaluation increases, how can participants work together to address the need for preparing evaluators with the appropriate knowledge and skills?

2. **Networking: How to Develop a Line of Communication**
   Participants: Everett Chavez, Rosemary Christensen, Anya Dozier-Enos, Edna MacLean

   - What services are currently available to support the development of a network of evaluators for on-going communication?

3. **Dissemination of Information about Training, Relevant Evaluations and Pertinent Literature**
   Participants: David Beaulieu, Susan Faircloth, Eric Jolly, Craig Love

   - In what ways can participants use their organizations, networks and connections to disseminate information that will help to expand awareness of needs, strategies and programs (i.e., establishment of a database)?

Discussion Highlights

Training and Future Needs
Tim Begaye

This session began with a general discussion regarding where to begin our focus and in which direction to go with the ideas we generated. We were able to gain an understanding about our responsibilities and direction with the help of this guiding question:

> *As the demand for evaluation increases, how can participants in this working session work together to address the need for preparing evaluators with the appropriate knowledge and skills?*

This guiding question helped us generate a framework for working together. We would address the need for preparing evaluators, and the knowledge and skills required for evaluators to work effectively with Native people. From this, we delved into creating a concrete framework for training and preparation. The members of the working session agreed that Indian country needs more evaluators, which means that training is necessary to prepare evaluator candidates with the necessary knowledge and skills for both theoretical and practical applications. There were a variety of opinions, suggestions and recommendations for how to achieve this.

Who is Being Evaluated

An important question that launched this discussion is: who are we talking about when we discuss relevant and appropriate evaluations in Indian country? More specifically, how do we begin to structure culturally sensitive evaluations when there exist over 500 Native nations in the United States with as many distinct languages and cultures? How do we introduce concepts of evaluation to tribes like the Hopi and other pueblo groups in the Southwest with very closely guarded and closed cultural practices, or to eastern tribes that live as part of urban communities and are not recognized as tribal groups? Another important question raised was evaluating programs that focus on young Native children today (who are constantly exposed to outside influences through music, television, media and advertising, want to be part of the mainstream society and are increasingly challenging Native leaders). In addition, how do we evaluate community programs where large numbers of tribal members are moving to urban or off-reservation areas for economic, educational or other reasons?

So, when we ask the question of "who," the answer is complex because Native people are multicultural, multiracial and multinational. Due to the complexity of Native cultures, the group was further challenged with developing a model to fit a diverse set of people and social systems.

Next, the group tried to set the context for the knowledge and skills an evaluator must have, considering the resources available to address the problem.

The Context: Where Evaluation Takes Place

A lengthy discussion around the diversity of Native cultures made it quite clear that Indian country is comprised of vastly distinct groups of people and that we must be cautious about our definition(s) of Native culture and how to apply the term to a variety of Native people. For evaluators, being prepared to work in a Native context really means being prepared to operate within a multitude of multicultural contexts. It will be challenging to prepare evaluators to be culturally sensitive, aware and appropriate in every Native context.

An important question raised regarding context is how we begin to address the issue of cultural sensitivity with those evaluators who are already conducting evaluations without relevant or sufficient training. One suggestion was to supplement current evaluation teams, often composed exclusively of non-Natives, with Native evaluators. The assumption here is that Native evaluators are more aware of Native cultures and bring a more sensitive perspective to the evaluation team. Again, we must be cautious balancing what is appropriate with assumptions. However, the group agreed that we needed to emphasize that Native evaluators should participate in evaluations because they tend to view Native communities through a different lens than their non-Native counterparts.

Training

In order to focus the discussion regarding training, the group considered the following questions:

1. *How do we identify candidates for training?*
2. *How do we provide support for evaluators and keep them both sensitive and effective?*
3. *What kind and what level of training do evaluators require in order to conduct culturally sensitive and effective evaluation?*

The question of training teachers as evaluators was raised. However, potential barriers exist, such as whether teachers would have the ability and willingness to serve as evaluators given their considerable time and financial constraints, and whether unions would permit them to put in time for work not prescribed in their contracts. A possible alternative to teachers could be other educators, such as curriculum specialists or other non-classroom educators, who would already have some educational training and expertise. The group agreed, however, that both Native and non-Native evaluators who will be evaluating Native programs should be considered candidates for training.

Formal academic training in evaluation exists at institutions such as UCLA and North Carolina State University. Two concerns regarding these types of programs include: 1) cost and 2) the perception that there is not a need to change or extend existing curriculum to address issues relevant to Native evaluators or programs.

While the group agreed that training is necessary, they did not wholly agree on a catalog of skills that an evaluator requires. In general, the group agreed that training would need to provide multifaceted knowledge and skills including qualitative and quantitative data collection and analysis methods, report writing and survey techniques. This knowledge and these skills provide the first step, or foundation, for understanding the evaluation process.

Next we must consider what differentiates evaluation in a Native context from evaluation in a non-Native context. Evaluation in a Native context must include sensitivity to and understanding of the cultural nuances at play. For evaluators who are going to work in a Native context, training must also address this issue. Addressing this component is more complex. It may be accomplished through the composition of evaluation teams to include multiple lenses and voices, which result in multiple interpretations.

The next challenge is how to inculcate the knowledge and skills into some kind of training format.

Results and Recommendations

The following model shows the progression through training levels that the group developed and used to make recommendations. Using the concept of a ladder, an aspiring evaluator would ascend the ladder beginning with level one. One would take the first step at the bottom with little previous (formal or informal) training. Gradually, the evaluator would progress up the ladder, gaining knowledge, skills and experience from a variety of formally and informally structured learning experiences.

NSF Funding
Sensitivity to the Cultural Context of Communities, Programs, etc.

Level #5	Master Evaluator	Benefits
Expert Level, Ph. D., Ed.D.	Capable of doing all aspects of evaluation	
Level #4	**Mid-level Evaluators II**	**Benefits**
Graduate, Professional	Perform unsupervised evaluations Perform independent evaluations Certification in specific evaluation skills Master's Degree	Specialized evaluation skills
Level #3	**Mid-level Evaluators I**	**Benefits**
Graduate Professional Undergraduate	Mentoring (supervised) Perform supervised evaluations Perform simple evaluations Take courses at colleges Attend long term workshops	Preliminary training to move to higher level, take courses
Level #2	**School/Education Professional**	**Benefits**
	Attend workshops Take on-line courses Mentoring	Better insight into what an evaluation is
Level #1	**Apprenticeship**	**Benefits**
Short Term Training, Data Specific	Native data collectors Better, more accurate data Interpretation of cultural nuances	Provides a Native perspective

Long Term
Program Goals
Short Term

Some of the group's more specific recommendations are as follows:

- Requests for Proposals (RFPs) that are sent out by NSF may request an explanation of how culturally sensitive mechanisms will be incorporated into the evaluation component of the program being proposed.
- NSF might want to recommend what kind of training non-Native evaluators would need in order to conduct relevant and appropriate evaluations of programs in Indian country.

- NSF may need to ask proposers to establish short- and long-term goals and recommendations regarding culturally appropriate training.
- NSF may want to recommend that someone from the local Native community be a part of the evaluation team.

Networking: How to Develop a Line of Communication

Joan LaFrance

This report summarizes a discussion on the topic of developing and supporting a network of evaluators for on-going communication. However, before addressing that question, the group discussed general concerns regarding evaluation of American Indian and Alaskan Native programs. The discussion focused on the following issues:

- The importance of embedding evaluation within the community,
- The need for evaluators to have knowledge and skills to adapt Western research methodology to fit the culture and values of Indian country, and
- The need to create opportunities to train Indians in evaluation methods that are appropriate for tribal communities and Alaskan villages.

The group thought it important to include these concerns and their related recommendations in the record of the meeting.

After expressing a number of concerns regarding evaluation in general, the group discussed the need to create an inventory of evaluators. The final discussion focused on developing the network and ways in which to promote ongoing communication.

Embedding Evaluation in the Community

The history of research exploitation in Indian country raises issues for evaluation. Evaluation is different from research in that it is responsible to a program and not to the Western knowledge creation that is the goal of research. However, in their allegiance to funders and their grounding in research methods, evaluators are just as capable of failing to be responsive to community norms and values as researchers. For this reason, evaluation in Indian country should be attentive to community ownership and participation. As one group member explained:

> "[Non-Native] researchers are not even aware of a special code of ethics that might apply in Indian country. That is why I think it is very powerful to try and have the evaluation come out of the community with the elders or with teachers in the day school who are community members. If you are going to be living in your community forever, you are a little bit more aware of those ethical issues than you are if you are coming from the outside."

Since it is not always possible to use community members to conduct evaluations, tribes should consider developing their own research and evaluation review processes to guide outsiders. The group strongly endorsed such a process, with one member noting:

> "If I were an [outside] evaluator… what I would find helpful is if that community had some kind of body established to review the kinds of research that would come into the community along with the type of evaluation that would occur with the research. In some of our communities, they have a cultural sensitivity board. When a new policeman comes into town, he or she has to sit with these elders and people who know about the culture for a couple of days just to get immersed in the community's expectations. I would find that a really helpful resource."

The group agreed that tribal review boards should assist in moving the process of evaluation forward. They should not be viewed as an obstacle to be overcome, but a resource to help guide the process and assure the community that the evaluation will lead to improving services to tribal members. Given the history of abuse from researchers, an internal board or committee to review the purposes and methods of evaluations could ease community fears that evaluation may be exploitive and detrimental to tribal programs.

Developing review boards will take resources. Funding sources that require evaluations should consider developing a program to assist tribes to establish research review boards. The funding agencies could look at models currently being used and develop a package or kit explaining how to develop a review board.

Review boards could serve a much broader purpose than just meeting federal requirements. As one group member noted:

> "I think, when we are designing programs, we are trying to design programs that meet the needs of the community. I think that this is a way to move beyond just having federal programs mandating this process, but a way for tribes to develop road maps for their communities that are really attentive to some of their human, health, environmental and educational needs."

Another member of the group explained that working on establishing a community review process would encourage a tribe to say, "This is how our particular culture and community evaluates itself, these are its values, and this is what is held sacred or important for improving the community processes." She concluded, "That is what an evaluation does–find ways to improve a project or a process."

Special Knowledge and Skills

Complementing the discussion about embedding evaluation in community processes was the concern that evaluators should have special skills and knowledge to work in Indian country. The conversation centered on cultural competencies for evaluators.

Ethics is an important concern. Although informed consent is basic to ethical practice in evaluation, there are deeper issues at stake when interviewing in Indian country. Tribal elders need to be made fully aware of what will be discussed in an interview. Interviewers need to be sure that what they write or interpret from an interview is an accurate reflection of what was said. As one member explained:

> "It's making sure that the evaluators comprehend what you are saying , and that you understand and consent to how what you are saying will be used…."

She concluded that there should be cultural competencies for working with elders so that evaluators don't make mistakes.

The group noted that attempts to develop cultural educational competencies have had mixed results. Some efforts to identify educational competencies have merely put an Indian veneer on general education competencies, such as learning a number system in a Native language. Most members of the group felt that the competencies developed to train educators in Alaska could serve as a model for training evaluators.

The group concluded that there are some commonalities among tribes regarding ethics of working among Indians and Alaskan Natives. As one member noted, it would be possible to describe in behavioral terms what you need to do to respect elders in an Indian community. Other aspects of a protocol could explain that invasive questions are rude and that it is important to build trustful relationships before engaging in questioning. A protocol could stress the importance of negotiating the use of the evaluation outside the community.

Resources are needed to explore the development of competencies relevant for evaluators. It was recommended that funding sources that require evaluation assist American Indian and Alaskan Native evaluators develop competencies in partnership with Indian and Alaskan Native communities. These competencies could then be incorporated into criteria for evaluation for their grants and programs. The National Science Foundation (NSF) could start such a process.

Evaluators need to consider methodological approaches that work best in Indian country. For example, tribes and villages are small communities. Although sampling may be appropriate to obtain enough representation for an evaluation, it can cause some participants to wonder why they are not being talked to, why their neighbor's views are important, but not their views. Confidentiality can be a challenge in smaller communities and even a short description of a program participant can be revealing. Context is critical in understanding Indian country. This suggests that qualitative methods are just as important, or even more important than quantitative measurement.

Creating Training Opportunities

Establishing competencies and encouraging tribal research and evaluation review boards creates a need to recognize that evaluators will require special training to work in Indian country. Also, to embed evaluators in communities requires programs to train community members, program staff and educators in evaluation. The group had a number of suggestions for training. These included:

- Using tribal colleges for training. Tribal colleges could infuse cultural knowledge into evaluation training.
- Creating cohorts to go through evaluation training. This is based on the teacher education model where fellowships fund graduate study for educators. Although this training would be in major universities, partnerships with tribal colleges or Indian evaluation experts could ensure that cultural knowledge and competencies were included in the training.
- Establish summer institutes to train evaluators to work in Indian country.
- Provide internships for evaluators-in-training to work in Indian country, and internships for staff and community members to attend university programs.
- Seek funding from NSF and other funders to sponsor evaluation sessions at major Indian and Alaskan Native conferences. The presenters could discuss special issues in evaluation as well as recruit tribal community members, especially young people, into the field of evaluation.

Creating an Indian Evaluation Network

As the discussion moved to supporting the development of an Indian evaluation network, it was clear that there is no inventory of evaluators who work with American Indians and Alaskan Natives. A first step in supporting a network is to build the network. The American Evaluation Association (AEA) is not well known in Indian country. The American Educational Research Association (AERA) has a Special Interest Group (SIG) for indigenous educators. It is likely that some members of this group are experienced evaluators. There were a number of recommendations regarding creating an inventory of evaluators who work in Indian country:

- Use the AERA listserv to locate Indian evaluators.
- Use the EvalTalk listserv sponsored by AEA to locate Indian evaluators.
- Use the listserv for Indian professors to locate Indian evaluators.
- Research the Kellogg Foundation Consultant Database to find evaluators with experience in Indian country.
- Set up booths at major Indian conferences. The booths can promote the importance of having culturally appropriate evaluation and seek out conference participants who are or know Indian evaluators.

Creating an inventory will require resources. The group identified a number of potential supporters for this effort (listed later in this report).

Organizations to Assist in Creating and Supporting a Network

A number of organizations important to creating and supporting an Indian and Alaskan Native evaluation network have already been identified. However, it is helpful to list the results of the brainstorming session on organizations that could be used to assist in moving this effort forward. The list generated by the group includes:

Organizations for education and program evaluation:

American Evaluation Association (AEA)
American Educational Research Association (AERA)

Indian Organizations in which to promote culturally appropriate evaluation:

American Indian Science and Engineering Society (AISES)
National Indian Education Association (NIEA)
American Indian Higher Education Consortium (AIHEC)
National Indian School Board Association (NISBA)
Association of Contract Tribal Schools (ACTS)
State Indian Education Associations
Alaskan Federation of Natives (AFN)
Consortium of Alaskan Native Higher Education (CANHE)
Alaskan Native Education Council (ANEC)
Indian publications

Indian organizations that can provide political support for culturally appropriate evaluation:

National Congress of American Indians (NCAI)
National Tribal Chairmen Association (NTCA)

Organizations that can provide support for developing and sustaining a network:

National Council of Teachers of Mathematics (NCTM), especially the section on ethno-mathematics
National Association of Multicultural Education (NAME)
National Association of Bilingual Education (NABE)
American Association of Colleges for Teacher Education (AACTE) – Deans of Education Schools

Sponsoring or Funding Organizations for Building a Network

The recommendations in this report will require support and funding from organizations that have a vested interest in promoting more effective evaluation of American Indian and Alaskan Native programs. The group brainstormed and developed a list of potential funders. This list is preliminary and should not be viewed as comprehensive or exhaustive. It includes:

National Science Foundation (NSF)
Office of Indian Education (OIE)
Institute of Education Sciences (IES), U.S. Department of Education (formerly the Office of Educational Research and Improvement)
National Institutes of Health (NIH)
Justice Department
Defense Department
National Aeronautics and Space Administration (NASA)
Federal Government Interagency Councils
Kellogg Foundation
Casino Tribes

Recommendations to Support Communication Among Native American Evaluators

Assuming that a network of evaluators is created, there were a number of recommendations regarding support for ongoing communication:

- Use electronic media for networking.
- Encourage AERA to partner with AEA so Native Americans in AEA can participate in the AERA listserv.
- Create a link to an evaluation network in the Native American Professors listserv.
- Partner AEA with Indian organizations; place AEA exhibits at national organization meetings to continually build the network.
- Promote participation in AEA and attendance at the annual conference in November 2002 in Washington, D.C.
- Create an American Indian/Alaskan Native Evaluation Association that speaks specifically to Native American evaluators. Ask NSF to fund it as a pilot until it can stand on its own.

- Request funding to convene a conference on evaluation in Indian country for members of the network of Native American evaluators.

Additional Recommendations

There were a number of recommendations that emerged from the discussion regarding creating evaluation protocols and training opportunities. These included the following:

- Seek funding to create a summer institute for Native American evaluators. This needs to be a special institute developed specifically to address issues and concerns.
- NSF should provide training in evaluation for American Indian and Alaskan Native proposal writers to enable them to include more thoughtful approaches to evaluation rather than using the standard approaches.
- Government funders should require that some cultural perspectives in their evaluation criteria be written into proposals. Train government funders in the special needs and considerations for evaluation in Indian country and Alaska.
- When the Government Performance Results Act (GPRA) requirements for quantitative measurable objectives are implemented in tribal programs, it is important to consider special cultural issues in measurement.
- Request that the pending study of Indian education being undertaken by the Office of Indian Education look at evaluation issues in Indian education.
- Use the American Indian Science and Engineering Society (AISES), the National Indian Education Association (NIEA) and other similar organizations that reach out to students to involve young people with Indian evaluators, or find ways to include some information about evaluation in these organizations' programs. Find ways to engage students in evaluation. Learning how to do observations and reflect on an event, a critical aspect of evaluation, is a good critical thinking skill.
- Use Indian newspapers and magazines to promote and discuss evaluation issues.
- Create an evaluation strand at NIEA and in the AISES teacher track.
- Work with the American Indian Higher Education Consortium (AIHEC) to sponsor technical assistance and discussions of evaluation issues.
- Have exhibits on evaluation at national conferences (Indian and others).

Conclusion

At the conclusion of the discussion all members of the group felt that the effort to create a network of Indian evaluators is only at the beginning stages. Continued support is critical to keep up the momentum. Exploring ways to make evaluation more responsive to Indian communities and Alaskan villages will be an important contribution to the field. As one group member said, *"The conversation we are having is important to the evaluation community in general. The role of community, the role of ownership, the role of ethics… I think evaluators will welcome it."*

Dissemination of Information about Training, Relevant Evaluations and Pertinent Literature

Joan Esnayra

This discussion may be divided into six parts. First, the group defined what information is being disseminated. Second, they identified multiple dissemination vehicles. Third, they identified evaluation informants and dissemination partners. Fourth, they considered relationships among them. Fifth, they identified obstacles to dissemination. Finally, they discussed ways these obstacles may be overcome. Summarized below are the six parts of the discussion.

What information is being disseminated?

1. Results from relevant evaluations
2. Innovations in evaluation (i.e., new analytical approaches, new models)
3. Pertinent literature
4. Information about funding opportunities
5. Information about training

What are the dissemination vehicles?

Discussants generated a list and offered the following proviso: just because these dissemination vehicles exist does not mean they are effective at reaching all audiences. One group member added that training educators in this context ***is*** the vehicle.

1. Professional journals
2. The Internet
   Via web sites, listservs, archived online discussions with case studies, literature databases such as the Education Resource Information Clearinghouse (ERIC) and distance learning sites. The latter are not yet well developed.
3. Funding agencies and their contractors
4. Curricula of Colleges of Education
   (Carnegie 100, state school systems, Harvard University, Brown University, Coalition of Essential Schools)
5. Curricula of various evaluator training groups
6. Accrediting associations
   Via representatives who conduct site visits, publish reports and convene or participate in regional meetings
7. Professional association meetings
   Via talks, workshops, poster presentations and conference materials
8. American Evaluation Association (AEA)
9. American Indian Higher Education Consortium (AIHEC)
10. National Council of Teachers of Mathematics (NCTM)
11. National Science Teachers' Association (NSTA)

12. President's Initiative on Tribal Colleges and Universities
13. Bureau of Indian Affairs (BIA) school systems meetings and workshops
14. American Indian Education Research Association (AIERA)
15. National Indian Education Association (NIEA)
16. National Indian School Board Association (NISBA)
17. State Indian Education Associations

Who are the Evaluation Informants and Dissemination Partners?

One group member noted there are 1300 schools in 27 states that have 10 or more Native American students. There are 29 two-year tribal colleges, 4 four-year tribal colleges and 500,000 Native American students in the United States.

The group identified the following evaluation informants and dissemination partners:

1. Federal Government:
   Bureau of Indian Affairs, Department of Education, National Science Foundation, Department of Defense, White House Interagency Council, White House Initiative on Tribal Colleges and Universities
2. State Government:
   Departments of Education, Indian Affairs, Criminal Justice, Juvenile Justice
3. County Government:
   Criminal Justice, Juvenile Justice
4. Public Schools
   Head Start and other early development programs
   K-12 public schools
5. Public and Private Colleges and Universities
6. Tribal Schools
   Head Start and other early development programs
   K-12 tribal schools
   Tribal colleges
   Tribal Education Offices
7. Private Industry
   Nonprofit community-based organizations
   Evaluation Industry (Westat, Orbit, AIR, etc.)
8. Private Foundations

What are the Relationships among Evaluation Informants and Dissemination Partners?

The group examined relationships among informants and dissemination partners in an attempt to locate critical communication blocks that can negatively impact dissemination. The table below is a visual representation of the results of that discussion. Dark gray boxes represent GOOD information flow. Light gray boxes reflect VARIABLE information flow. Striped boxes identify information BLOCKAGE. Black boxes are relationships the group did not consider. After mapping these relationships, the group took a closer look at obstacles to dissemination in the next part of their discussion.

	Fed	State	County	Pub/Priv Collg	Public K-12	Public Hedst	Tribal Collg	Tribal K-12	Tribal Hedst	Priv. CBOs	Priv. Indsty
Fed					1			2			
State											
County											
Pub/Priv Collg					3		4	5			6
Public K-12	1			3			7	8			9
Public Hedst											
Tribal Collg				4	7			10			11
Tribal K-12	2			5	8		10				11
Tribal Hedst											
Priv. CBOs											
Priv. Indsty				6	9		11	9			

Relationships where information flow is BLOCKED include:

1. Feds & Public K-12
2. Feds & Tribal K-12
3. Public/private colleges & Public K-12
4. Public/private colleges & Tribal colleges
5. Public/private colleges and Tribal K-12
6. Public/private colleges and Private Industry
7. Public K-12 & Tribal colleges
8. Public K-12 & Tribal K-12
9. Public K-12 & Private Industry
10. Tribal colleges & Tribal K-12
11. Tribal colleges & Private Industry

What are the Obstacles to Dissemination?

The group agreed that there is no generalized knowledge about how dissemination among the partners is carried out. This absence of information impinges upon our ability to fix the dissemination problem.

Consider the private evaluation industry. Government provides information to industry, but the flow of that information is unidirectional. Most of the data provided to industry are not made available to others who might be able to use them. Resentment towards the federal government is another obstacle to dissemination. Some believe that federal authorities view evaluation simply as a way to get rid of programs. Such a belief is most prevalent among tribal education systems and public K-12 schools.

Migration is another obstacle. Native American students often move between public and tribal education systems. Our ability to measure outcomes for these students is proportional to our ability to track them. Unfortunately data between these systems are not shared.

One group member pointed out another obstacle: the lack of capacity in Indian country.

> “We need more Native American statisticians, mathematicians and researchers. We need information technology infrastructure such as fiber optics, T1 lines and satellite transmission for rural areas. The 1996 Telecommunications Act excluded Indian reservations…. The Act was amended in 1998 because of that, and that left Indians behind everyone else. Did you know that telephone service penetration on Indian land is only 48%?”

Another obstacle to dissemination is the enduring cultural gap between Natives and non-Natives. Even among Indians there is a cultural gap between those who live in urban areas and those who don’t.

> “Only a small group of individuals know how to avail themselves of Indian resources. Indians in Indian country know about many of the existing Indian resources. In contrast, non-Indian evaluators are often unaware of these resources, especially when they evaluate Indian students in urban settings. Similarly, those evaluators who come into Indian country as part of a systemic initiative generally do not know about existing Indian evaluation resources.”

Recommendations: How Can These Obstacles be Overcome?

A shift in thinking is needed on the part of federal authorities. Evaluation should not be regarded, as it has been, as an under-funded afterthought. Summative evaluations are passé. The classic “strings attached” evaluations that punish for negative findings have to go. Instead, evaluation should be formative, positive, developmental and ongoing. One group member added, “Evaluations need to include frontline educators, not just the administrators who are responsible for managing funds.” The unidirectional data flow between federal government and private industry needs to change. Industry needs to make publicly funded data sets available for others to analyze and benefit from. Longitudinal student tracking is sorely needed. In California, children of migrant farm workers are provided with their own CD containing information about their educational history. When they move, the CD goes with them to the next school.

One group member asked, “How do you evaluate Native American communities?” and went on to say, “Get them involved! Conduct collaborative evaluations. Have program providers participate in the development of the evaluation. Make it a required activity on the part of the funding agency. Invite program providers to help identify the questions that will be asked and what the outcome measures should be. Let them participate in interpreting the data and their implications. Make them full partners on the evaluation team, and be sure to share the results of the evaluation with the program participants. In this way, the evaluation itself is the collaboration vehicle.”

Yet another suggestion was to assemble reciprocal evaluation teams between public and tribal colleges and K-12 schools. On the subject of information exchange, one group member said, “There are 22 Indian teacher training programs and all are connected to a college of education. The teachers must come from either a tribal school or a public school with a large Indian student population. Let’s get them talking to one another. The Navajo have an accreditation program called the North Central Association. It is a good model for local information exchange.” Another group member added, “The Bureau of Indian Affairs should convene a meeting of stakeholders in Indian education evaluation.” A final suggestion for overcoming obstacles to dissemination is to merge the membership lists of relevant professional organizations to create a more powerful vehicle for dissemination.

CLOSING REMARKS

Elmima Johnson
Senior Staff Associate
REC/EHR/NSF

Before we say goodbye, I would like to explain the impetus for this meeting. This workshop is being held under a contract with the American Institutes for Research for a series of actions focused on the cultural context of evaluation within the framework of capacity building. This year we proposed three major activities. This workshop is the first. The second activity is on a different level. We are in the process of developing a theoretical model for training and capacity building in evaluation, a model that will incorporate the concept of contextual factors and their influence on the process of evaluation. This is not an easy task and we have asked a panel of experts to assist us. Some of the expert panel members attended this workshop and sat in on the subgroup discussions to gather input for our model development activities. The third planned activity is a session on the cultural context of evaluation, which we will present at the American Evaluation Association (AEA) meeting in November 2002. So you see this workshop is part of larger effort, which we hope will be expanded.

I would like to thank everyone for joining us for these two days and promise you that NSF will keep in touch. First, you will receive a copy of the published proceedings of this workshop. I hope you will find it useful as a reference document. Second, we plan to tap your expertise by inviting you to serve as proposal reviewers. Third, we will continue to solicit feedback from members of this group as we plan follow-up activities related to capacity building.

Thank you for joining us. We did hear you.

Carlos Rodríguez
Principal Research Analyst
American Institutes for Research

I speak not only for myself but also for what I've heard other individuals say since yesterday about the nature of this truly pioneer work. To our knowledge, there has not previously been a pulling together of these kinds of minds over this kind of topic. I want you to know that it is really quite powerful from NSF's perspective, and part of that attention goes to you because of what you do. I don't say that just to pat you on the back but to say it's moving in the right direction.

Elmima Johnson and I have worked together for a few years now and I see how she is changing the thinking at NSF. Part of that is getting your voices heard. I was struck by the metaphor that Eric Jolly used about "missing bricks." What we have been engaged in since yesterday has been forming and firing some of those bricks so that they can become part of the pathway that eventually winds up bettering our Native American students.

When we talk about theoretical model-building, there are a number of features that have to be identified. We're building a theory of change in evaluation. Part of the change that comes out of this meeting is the notion of communal, collective building of knowledge. Collective understanding is not part of the rather autonomous or atomized approach we generally take to evaluation. This is a very significant contribution from this group, and it has been expressed by saying that practitioners are part of the problem and part of the solution. Practitioners have to be at the table

both talking about the problem and the solution in which they are engaged. In the field, we call this "participatory" or "action research." In our breakout group session on dissemination of information, I called this "participatory evaluation research." I believe your work here is a real contribution that can inform NSF's direction in evaluation initiatives. We will be diligent in our work with NSF to pursue the idea that participatory evaluation research must become a critical feature of culturally and contextually relevant evaluation efforts.

One issue that I find challenging in terms of guiding some of our work are the statistics that were cited during the dissemination breakout group. There are about 1,300 schools in 27 states that actually have Native American students in them. In those 27 states and in those 1,300 schools, we have about 95 to 98 percent of the Native American student population in the United States. This in itself is a way of informing NSF and other federal minds about the uniqueness of this challenge. Policies that come from Washington tend to homogenize people, groups and ideas. We make policies for *all* Native Americans, for *all* Hispanics. We do not address the differences that are so important.

If I was a CEO of a major entrepreneurial investment organization, what marketing strategy would I develop to target 500,000 individuals in 27 states? There would be some marketing strategists and companies that would be banking maybe billions of dollars on getting their message out. And that's part of why I like the notion that Craig Love came up with in terms of taking kind of consumerist approach. This is not an impossible problem or challenge to deal with. What do we have? Over 30,000 school districts in this nation among all the states? I'm not minimizing the challenge, but I'm trying to put it in perspective. We've been dealing with the unmanageability of it for decades. As one of our expert authors has reminded us, we know the problem. We've been looking at the achievement gap for a long time. We keep coming up with different explanations for the achievement gap. We keep understanding the problem, but we haven't figured out the solution. This solution can be found, I think, by following these steps:

1. We need more descriptive information about how we are doing it now. We do not have enough information about how Native American evaluations are actually playing out. We've had lots of ideas surface yesterday and today, but we need a descriptive study. What do we know about how Native Americans are being evaluated in STEM? In K-5, in undergraduate, in tribal colleges, across the entire spectrum? We don't have that information and it is extremely important. That's one step that comes out of today.
2. We also have the brick making, the real context of the situation, the parameters of the challenge—the 1,300 schools, the half million children, the 27 states.
3. We have this notion of building in partnership with the community as active and live members. Community must be involved at every level in evaluation, from inception to interpretation.
4. We didn't get time to talk a lot about it, but I think we need to spend some time on identifying the *cultural stressors* for Native Americans in the educational process. Eric Jolly talked about that when he talked about the groupings. We also have cultural stressors that are social in nature—the high suicide rates, the high substance abuse rates, all of the cultural stressors. What are the stressors when children move out of a Native American environment and context and move into mainstream environments and contexts? How do we measure these stressors so that evaluators are able to identify the appropriate weights associated with these factors?

In terms of building an evaluation cadre, I believe NSF could have a significant cache not only at the association level but also in colleges of education. One of the things that struck me too about our work the last couple of days is that most of us and most of you have contributed in very targeted ways to looking at creating interventions. All of this is very targeted work—the SIGs, the TIGs, the RFA suggestion that you don't get funded if you don't have a participatory model—those are very targeted kinds of interventions.

Finally, I'd like to say that part of the challenge is looking at the cultural nuances among Native Americans. Did anybody note how many stories were told yesterday? Storytelling is a discourse model, it's a way that this community shares its information with itself. We do not yet know how to integrate story-telling into our evaluations. That's a little bit out of the box for what we are doing with evaluation. But if we don't think out of the box with this particular challenge as we have since yesterday, we are not going to change the problem.

The problem that we all clearly understand needs to be solved. Finally, I didn't want to miss Craig Love's point about this notion that a key feature of effective evaluation for Native American schools must be routinized, participatory evaluation. The next generation of informing culturally relevant evaluations is that there is a way of doing this; there is a routine you have to follow. If you want to do it well, there is a way of doing it well. It is not left up to chance. It's not anecdotal. It's left up to an evidence base, if you will, but there is a way that we can say to schools and to evaluators, "Here's a better way to do it and these are the steps to follow." I believe that we have started that process in this pioneer work.

Anselm Davis
Program Director
Rural Systemic Initiative Program
Division of Educational System Reform
EHR/NSF

First of all, I want to acknowledge the National Science Foundation for allowing this Native American to be a participant in this workshop and to be a part of the Foundation. I thank Dr. Johnson for the opportunity for the Rural Systemic Initiative (RSI) to be a co-sponsor of this workshop.

The RSI effects the academic achievement of students in math and science by enhancing the capacity of our Native American people and others. Through the evaluation process, we get some sense of how well this is being done, but the evaluation process has many issues that need to be addressed especially from a Native American perspective. I am grateful for the opportunity to bring all of you here today and yesterday to take a look at the issues of evaluation. I think this is a giant step on the part of the National Science Foundation to have the willingness to bring Native American people to NSF. There were some really outstanding thoughts and ideas that surfaced during the past two days. I take this opportunity to acknowledge NSF for bringing us together.

Another really significant part of what NSF has allowed us to do is to allow our Native American thinking to take precedence. In that regard, we are always thinking holistically and that encompasses spirituality. We began this workshop with an elder putting us in touch with the

universe for the purpose of focusing on the child and his or her education. We have come full circle. Now it is time to acknowledge Harry McCabe, to thank him for being with us yesterday and for coming back this afternoon to close this workshop in the manner in which we began.

Harry McCabe
Elder

[Closing Navajo prayer reminded us as we closed the workshop and prepared to leave that there is beauty in all of us and beauty all around us.]

APPENDIX A
Workshop Agenda

Thursday, April 25

8:00 - 8:45	Informal Networking
8:45 - 9:00	Introduction to the Workshop—Dr. Elmima Johnson, Senior Staff Associate, Education & Human Resources (EHR), NSF Welcome — Harry McCabe, Native American Elder
9:00 - 9:10	Greetings—Dr. Eric Hamilton, Interim Division Director, Research, Evaluation and Communication (REC), EHR/NSF
9:10 - 9:20	Building Capacity for Educational Evaluation—Dr. Conrad Katzenmeyer, Senior Program Director, REC, EHR/NSF
9:20 - 9:30	EHR Education Programs for Rural Populations – Dr. Anselm Davis, Program Director, Rural Systemic Initiative
9:30 - 9:45	Remarks — Dr. Judith Ramaley, Assistant Director, EHR/NSF
9:45 - 10:30	**Session 1: Evaluation Issues Relating to the Academic Achievement of Native American Students** Chair: Ms. Cathie Martin Presenters: Dr. Eric Jolly Dr. Rosemary Christensen Discussant: Dr. Grayson Noley **Guiding Question:** • The issue of the assessment of culturally diverse populations must be considered when promoting culturally sensitive evaluation. What are the specific evaluation issues relating to the academic achievement of Native American students? The discussion will highlight contextual factors, including rural vs. urban settings, approaches to high-stakes testing, test bias, test examinee preparation and best practices.
10:30 - 10:45	Break
10:45 - 11:40	Continue Session 1
11:40 - 12:00	Emergent Issues—Discussants

12:00 - 2:00 **Session 2: Resource Organizations and Programs**

Informal presentations of federal agency programs (ED, BIA, NIH, NSF) and National association activities (AISES, SACNAS, NIEA, AIHEC); resource materials available (Working Lunch)

2:00 - 3:45 **Session 3: Education/Training Opportunities for Native American Evaluators**

Chair: Dr. Clifton Poodry

Presenters:
Ms. Christine Chee
Dr. David Beaulieu

Discussant: Dr. Craig Love

Guiding Questions:

- What mechanisms are available to identify the current population of Native American evaluators?
- Does this population have specific education/training needs? If so, how do we meet them? The discussion will highlight current training activities, and how to build capacity of Native American evaluators within the education community.

3:45 - 4:00 Break

4:00 - 4:30 Emergent Issues—Discussant

Friday, April 26

8:30 - 9:00 Informal Networking

9:00 - 10:30 **Session 4: Developing, Maintaining and Expanding a Network of Native American Evaluators**

*Breakout Groups/**Guiding Questions**:*

1. Training: Future needs

Facilitator: Dr. Tim Begaye

- What mechanisms are available to identify the current population of Native American evaluators?
- As the demand for evaluation increases, how can participants work together to address the need for preparing evaluators with the appropriate knowledge and skills?

2. Networking: How to develop a line of communication

Facilitator: Dr. Joan LaFrance

- What services are currently available to support the development of a network of evaluators for on-going communication?

3. Dissemination of information about training, relevant evaluations and pertinent literature

Facilitator: Dr. Joan Esnayra

- In what ways can participants use their organizations, networks and connections to disseminate information that will help to expand awareness of needs, strategies and programs, i.e., establishment of a database?

10:30 - 10:45	Break
10:45 - 12:00	Continue Session 4
12:00 - 1:30	Lunch (on your own)
1:30 - 3:00	Recommendations from subgroups
3:00 - 3:30	Closing—Dr. Elmima Johnson; Harry McCabe, Native American Elder

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APPENDIX C
Biographies of Invited Participants

PAT ABEYTA, Ed.D.
Bureau of Indian Affairs/Office of Indian Education Programs

Dr. Pat Abeyta works for the Bureau of Indian Affairs, Office of Indian Education Programs as an Education Specialist. Her current assignment is with the Center for School Improvement, the office that is responsible for the implementation of policies, plans, regulations and guidelines for all BIA funded schools across the nation. She brings to this position over thirty years of working with Native American students as a teacher, as an educational diagnostician, as an administrator and as an instructor at colleges serving Native American students preparing to enter the field of education. She is and has been involved in Native American student assessments including individual diagnostic evaluations and in interpreting school-wide assessments.

Dr. Abeyta earned her Ed.D. in Educational Leadership with a focus on School Reform, and she has a Master's Degree in Educational Administration and a B.S. in Psychology and Biology.

DAVID BEAULIEU, Ph.D.

University of Wisconsin, Milwaukee

Dr. David Beaulieu, the former director of the U.S. Department of Education's Office of Indian Education, is the first Electa Quinney Professor of American Indian Education in the University of Wisconsin-Milwaukee's School of Education. He is a professor in the Department of Educational Policy and Community Studies.

The position, the School of Education's first endowed professorship, is funded through a $1 million gift from the Milwaukee Indian Community School. It honors pioneering educator Electa Quinney, recognized as Wisconsin's first "public school" teacher. She taught American Indian and white children at a tuition-free school, which opened in 1828 at a Presbyterian mission in Kaukauna.

Dr. Beaulieu, an enrolled member of the Minnesota Chippewa Tribe, White Earth Reservation, was director of the U.S. Department of Education's Office of Indian Education from 1997 to 2001. The department's programs serve 500,000 American Indian learners in 1300 state public school districts and schools operated by tribal governments and the Bureau of Indian Affairs. His work at the Department of Education focused significantly on the development and implementation of the Executive Order on the Education of the American Indian and Alaska Native signed by President Clinton August 1998.

Before becoming director of the Office of Indian Education, Dr. Beaulieu served as The Commissioner of the Minnesota Department of Human Rights from 1991-1996, and was the first American Indian to be appointed as a commissioner in state government. Dr. Beaulieu, who earned his doctorate in education administration from the University of Minnesota, served on the Indian Nations at Risk Task Force, and has written extensively about Indian education.

Dr. Beaulieu has held faculty positions at Moorhead State University, the University of Illinois, Chicago and the University of Minnesota, where he was an Associate Professor and Chairman of the Department of American Indian Studies. He was also Vice President of Sintè Gleska College, Rosebud, South Dakota, which is the first tribally chartered Indian-controlled college to achieve accreditation at the Bachelor and Master Degree granting level. In 1993, he was elected to a three-year term and appointed to a fourth-year term as a member of the National Governing Board of Common Cause, a national lobbying organization that seeks to make government more responsive to the needs of all people. He is a former member of the National Governing Board for the University of Minnesota Alumni Association and has served as a member of the Board of Directors of the St. Paul Foundation, The Minnesota Foundation and The St. Paul Public Education Fund.

TIM BEGAYE, M.A.
Malcolm Weiner Center for Social Policy

Tim Begaye (Navajo) is from Tse' Dildooh'ii' (Hardrock), Navajo Nation, Arizona. He is a research associate with the Harvard Project on American Indian Economic Development and is a Teaching Fellow at the John F. Kennedy School of Government. He has a Master's degree in education with a specific focus on Teaching and Curriculum and another Master's degree in Administration, both from Harvard University. He is completing his dissertation at Harvard University Graduate School of Education on how education leaders define and implement leadership concepts in American Indian communities.

Mr. Begaye has researched the concept of leadership in several contexts: education, business and government. His current research focuses on conflict, adaptation and leadership in the context of current educational leaders. His research interest is in Native leadership issues in several settings: business, government and education.

Mr. Begaye is formerly a high school math and social science teacher. He has coached high school basketball and tennis, and directed a multicultural education program in New Hampshire. Mr. Begaye served as director of a department responsible for providing technical assistance to schools on the Navajo reservation that serve approximately 80,000 Navajo children. His department provided assistance to schools preparing applications for federal grants such as Goals 2000, including the Navajo Nation's own massive efforts to convert BIA schools to grant and contract schools.

Mr. Begaye served on the Editorial Board of the Harvard Educational Review and as a member of the Harvard Evaluation and Research Team for the Annenberg Foundation. He serves as a member of the board of directors of the North American Indian Center of Boston and the National Indian Education Association in Washington D.C. He teaches at the John F. Kennedy School of Government.

EVERETT F. CHAVEZ

American Indian Science and Engineering Society

Everett F. Chavez, a tribal member of Santo Domingo Pueblo, is the Executive Director for AISES. Everett is a graduate of Chicago's DeVry Institute of Technology and the University of New Mexico in Electronics and Electrical Engineering, respectively. Mr. Chavez has also served two terms within his tribal government. Briefly, he has worked for IBM, Digital Equipment Corporation, Tooh Dineh Industries, the All Indian Pueblo Council and the Intertribal Council of Arizona in various technical and managerial positions. He has been a member of AISES since 1985 and is a very proud product of AISES. With 27 years of combined work experience, Mr. Chavez brings to AISES a broad range of knowledge and experience from the tribal, corporate and federal non-profit sectors.

On a more personal note, Mr. Chavez strongly believes that the tribal community's greatest resource is its people, young and old, and that tribal human resources must be developed in parallel to all other tribal resource development efforts. By educating themselves, tribal people can meet the technical and social challenges of the future with vigor, but also further ensure that cultural considerations and wisdom are contained in all tribal decisions. He considers it an absolute honor to be a part of AISES and to be able to give back to the tribal community. Mr. Chavez also feels that AISES has been and continues to be instrumental to the success of many professional lives, and is truly at the forefront in developing future leaders.

CHRISTINE L. CHEE, M.C.
Arizona State University

Christine L. Chee was born in Tuba City, Arizona, located on the Diné (Navajo) Nation, in 1975. She is a member of the Diné Nation with Zuni Edgewater as her maternal clan and Towering House as her paternal clan. She was raised in a culture where traditional heritages are still practiced and considers herself bicultural. She earned her Bachelor of Arts degree in Psychology from the University of Arizona in 1997. She began the Master's of Counseling program at Arizona State University in the fall of 1998. For the past three years, she has worked as the Relevance of Culture in Evaluation Workshop organizer's graduate assistant. She completed the Master's of Counseling Degree in May 2002, and she was admitted to the doctoral program in Counseling Psychology beginning fall 2002.

ROSEMARY ACKLEY CHRISTENSEN, Ph.D.
University of Wisconsin, Green Bay

Dr. Rosemary Ackley Christensen teaches at the University of Wisconsin, Green Bay. Born on the Bad River Reservation in Wisconsin in 1939, she received her Master's degree (Ed.M.) from Harvard University in 1971, completed the Ph.D. course work for Educational Administration at the University of Minnesota, later re-entered the University of Minnesota as a cohort member of the Leadership Academy and completed the course work and doctoral work for a Ed.D. in 1999. Her dissertation is entitled: *Anishinaabe medicine wheel leadership: The work of Dave F. Courchene, Jr.*

In addition to teaching, Dr. Christensen has had lengthy experience as an administrator, curriculum developer, planner, writer, researcher and Indian education advocate. She is a founding member of the National Indian Education Association, and in recent years worked with the Ojibwe language, writing and producing 5 units for family use. She is interested in and works with school districts in achievement gap activities, presently working with the Green Bay school district on planning a longitudinal study. Presently Dr. Christensen is working on writing a model promoting an American Indian learning and teaching style centered on core American Indian values and elder epistemology.

PAMELA DeRENSIS

White House Initiative on Tribal Colleges and Universities

Pamela DeRensis is the Deputy Director of the White House Initiative on Tribal Colleges and Universities, U.S. Department of Education. In this role, she provides support to the Director in advocating, facilitating and guiding the implementation of the Executive Order on Tribal Colleges and Universities.

Ms. DeRensis, a member of the Lumbee Tribe of North Carolina, has extensive experience serving as liaison in Indian Affairs both with the federal government at the Departments of Energy and Labor, and with the North Carolina Commission of Indian Affairs, where she began her career.

Ms. DeRensis earned a Bachelor of Arts Degree from the University of North Carolina at Pembroke, and studied Public Health Education at the University of North Carolina at Chapel Hill. She makes her home in Virginia.

RICHARD DURÁN, Ph.D. (Expert Panel Member)
University of California, Santa Barbara

Dr. Richard Durán's interests center on human activity and the construction of cognition and culture through social processes. He focuses programmatically at present on ways that technology mediates cultural and social practices of learning and communication with an emphasis on immigrant Latino adults and children in school and after-school settings. In his program, the term "literacy" is not restricted to reading and writing and their enactment. More broadly from a cultural historical and critical pedagogy perspective, he is interested in how persons "read" and "write" their worlds and themselves in their daily practices and in their efforts to become competent participants in community and other social institutions. This includes reading and writing in their more restricted sense. In recent times Dr. Durán's empirical research has examined ways that teachers and students take up technology as a learning tool, children's literacy learning in after-school computer clubs, and immigrant parents and children using technology to learn and do desk-top publishing. In addition, he is actively involved in assessment policy analysis and reform at the state and national levels with special attention to the education of English language learners.

Some Recent Relevant Publications:

Durán, R. P. (2002). Technology, Education, and At Risk Students. In Stringfield, S. & Land, D. (Eds.) *Educating At Risk Students.* National Society for the Study of Education. Chicago: University of Chicago Press.

Durán, R. P., Durán, J., Perry-Romero, D. & Sanchez, E. (2001). Latino immigrant parents and children learning and publishing together in an after-school setting. J*ournal of Education for Students Placed At-Risk.*

Durán, R. P. (2000). I*mplications of Electronic Technology for the NAEP Assessment*.. Palo Alto: American Institutes for Research, NAEP Validity Studies Panel.

Vásquez, O. & Durán, R. (2000) La Clase Mágica and El Club Proteo: Multiple literacies in new community contexts. In G. Gallego & S. Hollingsworth (Eds.) *Challenging a single standard: Perspectives on multiple literacies.* New York: Cambridge University Press

Putney, L., Greene, J., Dixon, C., Durán, R., Floriani, A., & Yeager, B. (2000) Consequential progressions: Exploring collective-individual development in a bilingual classroom. In C. Lee & P. Smagorinsky (Eds.) *Vygotskian perspectives on literacy research*. New York: Cambridge University press.

Durán, R. P. (1998). Learning and technology: Implications for culturally responsive instructional activity and models of achievement. *Journal of Negro Education*, 67, 220-227.

LORRAINE P. EDMO, MPA

American Indian Education Foundation

Lorraine Edmo, a member of the Shoshone-Bannock Tribes, Inc., was hired in May 2002 to direct the American Indian Education Foundation, a federally chartered, non-profit foundation, which was created in December 2000 under Title XIII, of the Omnibus Indian Advancement Act, P. L. 106-568. The purpose of the foundation is to promote and support educational opportunities for children enrolled in the 185 schools funded by the Bureau of Indian Affairs. Ms. Edmo has an extensive background in education that includes direction of two national Indian non-profit organizations and work on implementation of Executive Order 13096 on Indian Education at the U. S. Department of Education. At the Education Department, Ms. Edmo was a member of the Office of Indian Education management team where her duties included coordination of research and policy issues related to the education of American Indians and Alaska Natives. She served as a member of the Education Department's Research Working Group and assisted in planning and coordinating the first national research conference on Indian Education in June 2000. Ms. Edmo also served as the principal staff coordinator for the National Advisory Council on Indian Education (NACIE), a council that advises the Department on all Indian education issues.

From 1993 to 1999, Ms. Edmo directed the National Indian Education Association (NIEA) located in Alexandria, VA where she worked with a 12-member board of directors and coordinated the organization's annual convention that draws more than 3,000 educators every year. While at NIEA, Ms. Edmo worked in cooperation with the National Council of American Indians (NACI) and other Indian educators to secure Executive Order 13096 on American Indian and Alaska Native Education that was signed by President Clinton in August 1998. Ms. Edmo's management experience also includes nine years as Executive Director of the American Indian Graduate Center (AIGC) in Albuquerque, NM. AIGC provides graduate scholarship assistance to Indian and Alaska Native graduate students nationwide. An all-Indian board of directors governs AIGC. Her background also includes work at two other non-profit organizations and a brief stint at the Administration for Native Americans in the Department of Health and Human Services.

Ms. Edmo has a Master's Degree from the University of New Mexico in Public Administration and a Bachelors Degree from the University of Montana, Missoula.

ANYA DOZIER ENOS, Ph.D.
Santa Fe Indian School

Dr. Anya Dozier Enos is a member of the Pueblo of Santa Clara and the parent of two teenaged children, Lisa and Pasquala. Tribal affiliation and parenthood keep present the importance of quality Indian education, which is her professional focus.

Dr. Enos received her Ph.D. in educational psychology, with a focus on sociocultural studies, from the University of Illinois at Urbana-Champaign in 1998. Her advisor and mentor was Alan Peshkin, a pioneer of qualitative research in educational settings. She holds a Master's in liberal arts from St. John's College in Santa Fe, NM.

For the past twelve years, Dr. Enos has worked in several capacities at Santa Fe Indian School: teacher, pregnancy prevention coordinator, parent coordinator and senior researcher. In her current role as senior researcher, she works in the innovative Circles of Wisdom program. This program is based on Santa Fe Indian School's Community Based Education (CBE) Model, a model that has demonstrated the effectiveness of community-based education in motivating high school students and Pueblo communities to learn and teach academic subject matter in conjunction with school curriculum that meets state standards. One goal of the research is to identify and use research practices that are acceptable and useful in Pueblo Indian communities. Another goal is to identify community, educator and student definitions and understandings of the grassroots movement of CBE. She is also a co-principal investigator for a National Science Foundation teacher enhancement grant, which will incorporate CBE approaches to teaching math and science.

Dr. Enos has taught a variety of courses in education and research in local colleges and universities. For the past six years, she has been adjunct faculty at the College of Santa Fe, where she teaches courses in the Master's of Education for At-Risk Youth program. She has presented papers about CBE at several conferences, including the American Educational Research Association annual meetings and the National Indian Education Association's annual conferences. Her most recent publication is a chapter on Pueblo research methodology in *Multiple and Intersecting Identities in Qualitative Research* by Betty Merchant and Arlette Willis.

Living in her home community of Santa Clara allows Dr. Enos to participate as wife, mother, sister, aunt and community member in traditional activities, as well as serving on local committees and boards. These experiences reinforce her desire to assure research is appropriately practiced and is useful in community settings.

JOAN ESNAYRA, Ph.D.

National Academies of Science

Dr. Joan Esnayra (Yaqui) is a Program Officer at the National Academies of Science, in Washington, DC. Currently, she is Study Director for a large-scale evaluation of the extramural NIH minority research training programs. This thirty year retrospective study will examine trainee outcomes and other indices of program performance along the research education and training pipeline. Prior to this, she co-directed an Academies study to comprehensively evaluate NASA's Astrobiology Research Program. In addition, Dr. Esnayra worked on an Academies study of the policy issues relevant to Human Reproductive Cloning. She also worked on a study that examines the Organizational Structure of the National Institutes of Health (NIH). She has organized workshops on Genetically Modified Crops, Techniques in Life Detection, and the future of Bioinformatics. Prior to joining the Academies in 1999, Dr. Esnayra was a member of the California State Office of AIDS Multicultural Liaison Board for six years. In this capacity, she and her colleagues convened public hearings throughout the state, in an attempt to identify socioeconomic and cultural barriers to HIV prevention education services in California's diverse communities of color.

Dr. Esnayra earned her Ph.D. in Biology from the University of California San Diego in 1999. The focus of her doctoral research was genetics and genetics policy. Her baccalaureate degree in Philosophy was awarded in 1991, from the University of Washington, in Seattle. Dr. Esnayra currently serves on the Board of Directors for the Society for the Advancement of Chicanos and Native Americans in Science (SACNAS). She is also Vice-President of the Washington, D.C. Professional Chapter of the American Indian Science and Engineering Society (AISES). She is a nationally known disability advocate. Dr. Esnayra publishes and gives public lectures on the use of assistance dogs by individuals living with mental health disabilities. She is Chairman of the Board for a newly established nonprofit organization called The Psychiatric Service Dog Society, based in Arlington, Virginia.

SUSAN C. FAIRCLOTH, Ph.D.

American Indian Higher Education Consortium

Dr. Susan Faircloth is the Director of Policy Analysis and Research with the American Indian Higher Education Consortium located in Alexandria, Virginia. The consortium serves 32 of the nation's tribal colleges and universities. Dr. Faircloth is an enrolled member of the Coharie Tribe.

In December 2000, Dr. Faircloth earned a Ph.D. in Educational Administration with a concentration in Special Education, from Pennsylvania State University where she was a member of the American Indian Leadership Program. Dr. Faircloth is also a 1996 graduate of Penn State's American Indian Special Education Teacher Training Program where she earned a Master's Degree in Special Education. She also holds an undergraduate degree in History from Appalachian State University.

Dr. Faircloth's professional experiences in Indian Education include working with a National Indian School Board Association's project entitled, Creating Sacred Places for Children: Improving Indian Schools for the 21st Century; serving as a special assistant to the Director of the American Indian Leadership Program at Pennsylvania State; reviewing grants for the Office of Indian Education Programs and the Office of Educational Research and Improvement; and working with a Title IX Indian Education Program in a large, urban school system. Additional professional experiences include: secondary school special education teacher and academic skills coordinator for a student support services program in a North Carolina Community College.

Dr. Faircloth has been an active member of such professional organizations as the National Indian Education Association, the University Council for Educational Administration, the Council for Exceptional Children, and the American Educational Research Association.

Dr. Faircloth's primary research interests include professional development, particularly in the area of special education, for teachers and administrators; and the education of culturally and linguistically diverse students with disabilities, with a special emphasis on American Indian and Alaska Native students.

GERUNDA B. HUGHES, Ph.D. (Expert Panel Member)
Howard University

Dr. Gerunda Hughes is currently an Associate Professor in the Department of Curriculum and Instruction at Howard University. She is Co-Principal Investigator for the Assessment and Evaluations Innovations Project, Center for Research on the Education of Students Placed at Risk (CRESPAR). From 1995 to the present, she has been a member of the National Assessment of Educational Progress (NAEP) Validity Studies Panel for the American Institutes for Research. Dr. Hughes is Co-Editor-in-Chief of the *Journal of Negro Education*, a scholar-refereed publication published by Howard University Press.

Recent research has included: Broadening the Scope of Assessment in Schools (CRESPAR); Assessment in the Context of Culture and Pedagogy: A Working Conference (Spencer Foundation); and Developing and Evaluating Performance Assessment for College and Pre-College Mathematics (National Science Foundation). Dr. Hughes has a Ph.D. in Educational Psychology from Howard University and an M.A. in Mathematics from the University of Maryland.

ERIC J. JOLLY, Ph.D.

Education Development Center

Dr. Eric J. Jolly is a Vice President and Senior Scientist at the Education Development Center, a not-for-profit research and development think-tank which operates projects in more than 20 countries and 500 communities within the United States. He is a member of numerous honor societies including Sigma Xi, Phi Eta Sigma, Mortarboard and Golden Key. Dr. Jolly is a senior fellow for the UCLA School of Public Policy and has also been a Kellogg National Leadership Fellow and an Osher Fellow for the Exploratorium of San Francisco. He is the former Assistant to the Chancellor at the University of Nebraska having previously served in leadership capacities at universities around the country including posts of department chair, acting dean for education and associate dean of arts and sciences. He is fluent in several languages including sign languages.

An active scholar, Dr. Jolly has published many scholarly articles, books and book chapters and lectured throughout the world. His most recent book, "*Bridging Homes and Schools*," is a comprehensive resource for helping teachers reach out to, and engage, the families of both English-speaking and Limited English Proficiency students. He is the co-author of the acclaimed curriculum, "Beyond Blame: Reacting to the Terrorist Attack."

Dr. Jolly is a frequent trainer, advisor and keynote speaker for a wide range of educational and scientific organizations. He has recently worked with such diverse organizations as: National Science Teachers Association, National Council for Teachers of Mathematics, International Teaching for Intelligence Conference, Association of Science Teacher Educators, Association of Science and Technology Centers, Brazilian Education Ministry and the Society of Nutrition Science Education. He also serves as a science education consultant with several organizations including the American Association for the Advancement of Science and Youth Alive!

Dr. Jolly is currently an evaluation consultant to science education reform projects at ten tribal colleges and also serves on the board of the Putumayo Foundation. His past service to the Native community includes terms on the boards of the Nebraska (Lincoln) Indian Center and Rhode Island Indian Council, which he chaired. He is also recognized as a traditional storyteller and fiber artist. His work has been exhibited throughout the nation and his pieces are part of several important private and public collections including the Swope Museum and Gallery, the Smithsonian Institution and the Quisenberry Collection.

Dr. Jolly has continued to bring his interest in social problems to bear on issues outside the traditional university setting. He has authored two widely read newspaper columns; hosted national radio call-in programs for AIROS and NPR; founded the National Institute for Affirmative Action and serves on numerous national and community advisory boards including the Committee on Opportunities in Science (as chair) and the National Task Force on Technology and Disability (as co-chair).

JASON J. KIM, Ph.D. (Expert Panel Member)
Systemic Research, Inc

Dr. Jason Kim has been involved in educational reform programs and research for K-12 and post-secondary levels in various capacities since 1993. During the last 5 years, Dr. Kim has been Principal Investigator of an NSF project entitled, "Implementation of Conceptual and Operational Framework for Model Institutions for Excellence (MIE) Evaluation Design and Technical Assistance." He is also leading the current Historically Black College and University Undergraduate Program (HBCU-UP) project for development and implementation of a progress indicator system. Recently he served as a member of the National Advisory Panel for NASA's Office of Equal Opportunity's (OEO) Minority University Research and Education Program (MUREP).

As Principal Investigator, Dr. Kim has also been leading three large-scale, long-term evaluative studies for NSF's Urban Systemic Initiative (USI), Comprehensive Partnerships for Mathematics and Science Achievement (CPMSA) and Rural Systemic Initiative (RSI) programs. One of the USI Evaluative Study Reports, *Academic Excellence for All Urban Students*, was released in June 2001 through a NSF-sponsored Internet news conference.

Dr. Kim has designed, developed and implemented numerous evaluation and assessment instruments sponsored by federal or state governments for K-12 and college level programs. He has published numerous papers and provided workshops and consultations in the area of educational evaluation and assessment and information management systems and technologies. Dr. Kim founded Systemic Research, Inc. in 1995 to provide expertise in educational evaluation/information management systems. Prior to founding Systemic Research, he was a faculty member for ten years in the College of Engineering of Northeastern University, Boston.

JOAN LAFRANCE, Ed.D.
Mekinak Consulting

Dr. Joan LaFrance is owner of Mekinak Consulting, a management and evaluation service specializing in projects for Indian tribes and organizations. She is a Strategic Advisor (part-time) for the City of Seattle's Performance Resource Group which is involved in government improvement efforts such as performance measures, surveys of city residents and businesses, organizational research and organizational development. She has had experience in teaching research and evaluation methods, municipal budgeting, program development and management and curriculum development. Dr. LaFrance's former employers include: University of Western Washington; City of Seattle Office of Management and Budget; United Indians of All Tribes Foundation; and Seattle Public Schools, Seattle Indian Center.

Dr. LaFrance's evaluation experience includes: American Cancer Society programs in Indian country, National Science Foundation Grants to Northwest Indian College; FIPSE Grant to Northwest Indian College; Even Start programs at Lummi Nation and Makah Tribe; American Friends Service Committee; evaluation consultant for Indian Education Evaluation and Resource Center III; Evaluator for Project Ideal, Indian Teacher Training Program at University of North Dakota

Education

Harvard University, Ed.D. in Administration, Planning and Social Policy, November 1990. Areas of Concentration: Evaluation Research and Organizational Theory and Behavior. Dissertation: "Redefining American Indian Education: Evaluation Issues in Tribally-controlled Schools"

University of Washington (Seattle, Washington) Master's of Public Administration, June 1981. Thesis: "Salmon Resource Management: Contributions of Tribal Management in the Pacific Northwest"

Seattle University (Seattle, Washington) Bachelor of Arts, June 1965. Major—United States History

Papers and Publications

On the Launching Pad: Performance Measurement in the City of Seattle, Paper presented to American Evaluation Association, 1994 Annual Meeting, Boston, MA.

Stakeholder Evaluation in Tribally Controlled Schools, Paper presented to the American Evaluation Association, 1994 Annual Meeting, Boston, MA.

Lessons From Maine, *Harvard Educational Review*, Vol. 62, No. 3, Cambridge, MA, 1992.

Contributing author: *Treaties on Trial*, the revision of the book *Uncommon Controversy: Fishing Rights of the Nisqually, Puyallup and Muckleshoot Tribes*, University of Washington Press, 1984.

MARIGOLD LINTON, Ph.D.

University of Kansas

Dr. Marigold Linton, Cahuilla-Cupeno, was born and raised on the Morongo Reservation in Southern California. She received a B.A. in Psychology from UC Riverside and a Ph.D. in Experimental Psychology from UCLA. She was professor of psychology at San Diego State University and the University of Utah doing research on very long-term memory. Dr. Linton has served on the Board of Directors for the Carnegie Foundation for the Advancement of Teaching, National Indian Education Association, Society for the Advancement of Chicanos and Native Americans in Science (SACNAS) and Malki Museum (an Indian museum on the Morongo Reservation).

At Arizona State University, Dr. Linton was director of American Indian Programs; co-PI of NASA AISTEC (American Indian Science and Technology Education Consortium) and coalition leader of NSF-funded Arizona Tribal Coalition. Presently, she is Director of American Indian Outreach at the University of Kansas (KU) where she has helped obtain $10 million in biomedical research support from the National Institutes of Health for Haskell Indian Nations University and KU students. She is Co-PI on Haskell/KU's Bridges to the Future Grant, KU's Initiative for Minority Student Development, Haskell's Research Initiative for Scientific Enhancement and KU's Institutional Research and Academic Career Development Award.

CRAIG T. LOVE, Ph.D.
Westat

Dr. Craig Love has conducted research and studies on Native American populations, AIDS prevention and treatment and prevention of drug and alcohol abuse among prisoners. He has been the senior evaluator with seven Native American groups in a cross-site evaluation, and he consults with various tribal organizations. He has served as principal evaluator on a local Native American high-risk youth project. In addition to his position as Research Associate at the Center for Alcohol and Addictions Studies, he teaches courses in Native American studies at Brown University and is Lecturer in Psychiatry at Harvard University.

Dr. Love has served as project manager and consultant for two substance abuse treatment centers. In that capacity, he participated in writing grants, managing projects and conducting data analyses in a variety of projects including NIDA-funded AIDS outreach project for needle-using drug abusers, substance abuse treatment for incarcerated offenders and a follow-up study of treatment recipients. Dr. Love has been a consultant with the United Nations Development Program, the Washington, D.C. Police Foundation and the North Carolina Department of Corrections, among many other agencies. He just completed a project as principal investigator on a 3-year Robert Wood Johnson Foundation project testing the cost-effectiveness of drug abuse treatment in prisons. He was also principal investigator on two NIJ-funded prison treatment program evaluations and principal evaluator of a model drug court project in Massachusetts. He is also a co-principal investigator for a Center for Substance Abuse Treatment (CSAT) needs assessment of criminal justice populations.

Over the years, Dr. Love has written numerous articles on drug treatment in prisons, alcohol and drug treatment outcomes, substance abuse prevention programs in Native American communities and AIDS prevention.

EDNA AHGEAK MacLEAN, Ph.D.
Ilisagvik College

Dr. Edna Ahgeak MacLean became President of Ilisagvik College in July 1995. Dr. MacLean received her Ph.D. in Education from Stanford University and obtained her M.A. in Bilingual Education from the University of Washington. Dr. MacLean also did graduate study in Greenlandic Eskimo at Aarhus University and she received her teaching credentials at the University of California, Berkeley. While at the University of Alaska, Fairbanks, Dr. MacLean was awarded tenure and promoted to Associate Professor of Ioupiaq Eskimo. She was for several years the Special Assistant for Rural and Alaska Native Education to the State of Alaska Commissioner of Education.

A Native speaker of Ioupiaq, Dr. MacLean has developed many documents used extensively as references and guides to the Ioupiaq language and is well-known for her numerous presentations and workshops at conferences and seminars. She received the Alaska Federation of Natives Higher Education Awards for 1987 and 1995. Most recently in 1999, she received the Alaska Native Education Council Educator of the Year Award. Dr. MacLean is a Fellow of the Arctic Institute of North America, and been recognized by the Barrow City Council and the Ukpeabvik Ioupiaq Corporation for her contributions in education.

CATHIE MARTIN, M.A.

U.S. Department of Education/Office of Indian Education

Cathie Martin is currently Group Leader, Office of Indian Education, in the U.S. Department of Education. Ms. Martin has been with the Office of Indian Education for 12 years, serving as a Branch Chief, Division Director, Group Leader and Assistant to the Director. Prior to joining the Department, Ms. Martin worked with the Bureau of Indian Affairs, in the U.S. Department of the Interior, at both the school level and the national level. Her educational and teaching background includes elementary education, learning disabilities and speech therapy. She is a graduate of Northeastern Oklahoma University where she earned both a Bachelor of Science and a Master's degree in Education.

GRAYSON B. NOLEY, Ph.D.

University of Oklahoma

A member of the Choctaw Nation, Dr. Grayson Noley was born and raised in Eastern Oklahoma where he graduated from Wilburton High School. Following his honorable discharge from the U.S. Army, Dr. Noley received a Bachelor of Arts degree in music education from Southeastern Oklahoma State College. At Pennsylvania State University, he earned the Master of Education and the Doctor of Philosophy in Educational Administration.

Dr. Noley presently is Chair and Associate Professor of Educational Leadership and Policy Studies at the University of Oklahoma (OU). Prior to coming to OU, he was an Associate Professor at Arizona State University (ASU) and an Interim Associate Dean in the College of Education. He also was Coordinator of ASU’s White Mountain Apache Teacher Education initiative, Interim Director of ASU’s Center for Indian Education, Director of Tribal Leadership for the 21st Century and initiated the Navajo Principal’s Preparation Program.

Dr. Noley began his career in education as a high school band director in Coalgate, Oklahoma. Following that he served as a Talent Search coordinator and assistant director for Oklahomans for Indian Opportunity in Norman, project director for Oklahoma University’s Upward Bound program, director of Penn State’s American Indian Leadership Program, Assistant Professor of Education at Penn State and Director of the Cherokee Nation’s Education Department where he was responsible for oversight of Talking Leaves Job Corps, Sequoyah High School, Cherokee Nation Head Start, Higher Education, Adult Education and the JO’M contract. His work experiences, including his research and publication efforts, consistently have focused on the education of American Indians.

Named a fellow by the Kellogg Foundation’s National Fellowship Program, Dr. Noley also was honored as a distinguished scholar by the Standing Committee on the Role and Status of Minority Research and Development of the American Educational Research Association. His pursuits in education have led him to nearly every state in the United States, Belgium, Canada, Germany, Ireland, Peru, Nicaragua, Malaysia, Mexico, the Netherlands and the People’s Republic of China.

Dr. Noley has published a number of journal articles and book chapters on the status of American Indian education. Most recently he published articles entitled *Enlightenment ideals, moral philosophy, and Indian civility: The views of Benjamin Rush and Thomas Jefferson and the effect of enlightenment thinking and early nineteenth century imagery on twentieth century views of American Indians*. His previous research has focused on the history of American Indian education, teenage alcohol abuse, the quality of life in BIA off-reservation boarding schools and the need for American Indian school administrators, teachers and professors.

CLIFTON A. POODRY, Ph.D.

National Institutes of Health

Dr. Clifton A. Poodry is the Director of the Minority Opportunities in Research (MORE) Division at the National Institute for General Medical Sciences (NIGMS), National Institutes of Health (NIH). He is responsible for developing and implementing NIGMS policies and plans for minority research and research training programs. He also serves as a liaison between NIGMS and NIH, other federal agencies and the scientific community.

Prior to assuming this position in April of 1994, Dr. Poodry had been a Professor of Biology at the University of California, Santa Cruz where he also served in several administrative capacities. As a professor, Dr. Poodry was involved with minority student development through the NIH-sponsored Minority Biomedical Research Support (MBRS) and Minority Access to Research Careers (MARC) Programs. Over the years, he also served on the NIH review committees for both programs.

Dr. Poodry has received and directed grants from several agencies, including the National Institutes of Health, National Science Foundation and the Office of Naval Research. He was the Principal Investigator on a grant for undergraduate biological sciences from the Howard Hughes Medical Institute. He was for many years a faculty participant and advisory board member for the Headlands Indian Health Careers Program of the University of Oklahoma. Among the many Boards he has served on are the Boards of Directors of the American Indian Science and Engineering Society, the Society for the Advancement of Chicanos and Native Americans in Science, and the Advisory Committee on Minority Science Education of the American Association for the Advancement of Science. Dr. Poodry is also a founding member of Openmind, an association for the achievement of cultural diversity in higher education.

Dr. Poodry is a native of Tonawanda Seneca Indian Reservation in Western New York. He earned both a B.A. and an M.A. in Biology at the State University of New York at Buffalo, and received a Ph.D. in Biology from Case Western Reserve University. He was the 1995 recipient of the Ely S. Parker Award from the American Indian Science and Engineering Society for contributions in science and service to the American Indian community. In 1999 the State University of New York awarded him an honorary Doctor of Science for his contributions in science and to the inclusion of minorities in research careers.

FLORALINE I. STEVENS, Ed.D.
Floraline Stevens and Associates

Dr. Floraline I. Stevens received her Bachelor of Science degree from the University of Southern California and Master of Education and Doctor of Education degrees from the University of California, Los Angeles (UCLA). She held the following positions in the Los Angeles Unified School District (LAUSD): teacher, evaluation specialist, testing coordinator, assistant director for research and evaluation and director of research and evaluation from 1979 to 1994. She was the 1991-92 American Educational Research Association's Senior Research Fellow at the National Center for Education Statistics (NCES), U.S. Department of Education in Washington, DC; and from 1992-94 was a Program Director at the National Science Foundation, Division of Research, Evaluation and Communication.

Dr. Stevens retired from LAUSD in 1994 and currently serves as an independent evaluation and research consultant. Also, Dr. Stevens is a research associate at Temple University's Laboratory for Student Success (LSS), Mid-Atlantic Regional Educational Research Laboratory. She serves on several evaluation advisory committees including ones for the U.S. Department of Education and National Education Association. She is a former vice-president for Division H (School Evaluation and Program Development), American Educational Research Association and is the chair-designate of the Research into Practice Committee.

KAREN R. SUAGEE
U.S. Department of Education

Karen Suagee has worked at the At Risk Institute in the Office of Educational Research and Improvement (OERI) since 1995. Her work focuses on initiatives and projects related to the research and information needs of American Indian/Alaska Native (AI/AN), second language and rural populations. Ms. Suagee is primarily responsible for four areas:

1. Monitoring of American Indian, diversity and language projects under the CREDE Research Center (U.C., Santa Cruz) and the OERI Field Initiated Education Research Grant Program;
2. Participation in an AI/AN Research Working Group (established in furtherance of Executive Order 13096) since August 1999, to develop an AI/AN federal research agenda and a series of activities (i.e., national study, national surveys, grant competition, etc.) to implement the agenda;
3. Coordination of a new research grant program (FY 2001 AI/AN Education Research Grant Program) since January 2001, including proposed and final priorities, grant application development, grant competition, award, monitoring and technical assistance/project director meeting; and
4. Managing a task (ERIC/CRESS) to develop and maintain a web site devoted to AI/AN educational research (www.indianeduresearch.net) since August 2000.

From 1991 to 1995, Ms. Suagee worked in the Strengthening Institutions Program (Title III) in the Office of Postsecondary Education (OPE). She was primarily responsible for monitoring performance of grantees—including all tribal college grantees—and providing technical assistance via annual conference presentations and on-site visits. She also conducted annual tribal college meetings. Other duties included pre-award application review/funding recommendations and assistance with development and presentation of annual Title III conference. (Note: Title III supported 500 or so grantees annually. Pre-award review was a major activity in the grant cycle.)

From 1989 to 1991 in the Indian Vocational Education Program in the Office of Vocational and Adult Education (OVAE), Ms. Suagee was co-program manager, monitored grants, provided technical assistance and served as staff support for quarterly OVAE-sponsored intra-departmental AI/AN Education Coordinating Committee.

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