

Testimony of Dr. David Beaulieu before the Senate Indian Affairs Committee Oversight Hearing on “In Our Way: Expanding the Success of Native Language and Culture Based Education” May 26, 2011

Background:

My name is Dr. David Beaulieu. I am an enrolled member of the Minnesota Chippewa Tribe-White Earth Reservation. I currently serve as a Professor of Education Policy and Community Studies and Director of the Electa Quinney Institute for American Indian Education at the University of Wisconsin-Milwaukee. I have testified before this committee in the past concerning education of Native American students as Director of the Office of Indian Education at the US Department of Education and as President of the National Indian Education Association (NIEA) and last year as an expert witness related to Indian education and the No Child Left Behind Act.

My testimony is focused on what we know about the role of Native language and culture based education in the academic success of Native American Students from the theoretical, research, and best practice literature. I will refer primarily to my role as partner in a research and school based partnership that looked at the role of culturally based education that was jointly initiated by William Demmert Jr. and I. Dr. Demmert chaired and led the group. I will utilize the literature review on the relation of culturally based education to academic achievement developed by Demmert and Towner as part of that work and utilize the report of Dr. Teresa McCarty of Arizona State that was prepared for the U.S. Department of Education in 2009 on promising practices. Both documents have been provided the committee.

The need for research on Native language and culture based education:

Executive Order 13096 of August 6, 1998 on American Indian Alaska Native education signed by President Clinton called for the development and implementation of a comprehensive research agenda that included the requirement to “evaluate the role of native language and culture in the development of educational strategies”. The research agenda published by the U.S. Department of Education in 2001 had two priorities related to language and culture, 1. Research related to the effects on educational outcomes for students and schools of incorporating American Indian and Alaska Native language and culture into the school curriculum and 2. Research related to best practices demonstrated as effective for implementing a culturally relevant learning environment and identification of factors that serve as barriers or facilitators for implementation

President Bush signed Executive Order 13336 on American Indian and Alaska Native education on May 5, 2004 which called for an assessment of the impact and role of native language and culture on the development of educational strategies to improve academic achievement.

In 2002, responding to the research agenda’s priority, I was involved along with William Demmert Jr in a successful effort to develop a response to a Multi Award Task Order

(MATO) from the US Department of Education to consider whether it was feasible to conduct experimental or quasi experimental research to determine the impact of culturally based education on the academic achievement of Native American students and if so to propose a research design that would determine the impact of culturally based education on academic achievement. We were joined by the Northwest Regional Education Laboratory (NWREL) now Education Northwest that served as a research partner and fiscal agent and Roland Tharp from the Center for Research on Education Diversity and Excellence. (CREDE)

As part of that project William Demmert Jr and John Towner developed “A review of the research literature on the influences of culturally based education on the academic performance of Native American students” The review was specifically focused on determining what experimental or quasi-experimental studies had been developed related to impact of culturally based education to the academic achievement of Native American students. I focused on surveying all existing culturally based education programs in the United States so as to determine and classify the total array of what was being offered as culturally based education programs for Native American students. The review of the literature also reviewed the theoretical literature on the relationship of culture and language to academic achievement.

Our research group proposed a quasi-experimental research design for the purpose of determining the impact of culturally based education upon the academic achievement of Native American students to the Institute of Education Sciences (IES) in the summer of 2005. The design we had proposed was not funded and the Institute for Education Sciences (IES) did not request any other design to answer the research question despite President Bush’s Executive Order 13336 calling for an assessment of the impact and role of native language and culture on the development of educational strategies to improve academic achievement.

Our research group nonetheless continued to develop an effort to do the research by inviting five Native language immersion schools, along with schools with non language focused culturally based education programs to join the research partners as school based partners. Jointly the school based partners along with the research partners developed rubrics that defined and could potentially measure the extent to which culturally based education existed in a school community and curriculum based measures (CBM) of academic achievement in the language of instruction for each school in reading, writing and arithmetic. With these tools developed, the design called for comparing the academic achievement of a school that had “culturally based education” with a school that did not serving Native American students from the same community.

A number of groups such as King Kamehameha Schools, the Kellogg Foundation, and The Education Testing Service (ETS) supported various aspects of the work allowing our partnership to continue the effort until we ran out of funding possibilities over a year ago and the chair of our group Dr. William Demmert Jr had passed away. There has not been any support for this type of research since the initial exploration of the feasibility of

doing experimental or quasi-experimental research was requested during the period 2002-2005.

The importance of doing research on the subject outside of the fact that Native American educators and leaders wish to have the kind of information that allows for the effective development of education programs for Native American students is the realization that all of our Native American education related statutes in part suggest a relationship of meeting what is known as the special educational and culturally related academic needs of Native American students with academic achievement.

### Theoretical Literature

The technical proposal of our research partnership to the Institute of Education Sciences “Preliminary Study for Experimental Research on Culturally Based Education for American Indian/Alaska Native Students” identified three major theoretical approaches within the literature to addressing issues related to CBE interventions. The three approaches offer different mechanisms and explanations for how and why such interventions are effective but can be considered ever more elaborate iterations of the same concept related to the need for social cultural congruency between the expectations of the school and the dispositions of learners for education related discourse.

### Cultural Compatibility

Cultural compatibility holds that the more human interactions in the school and classroom are like those of the student’s culture, the better the goals of the school will be reached. Efforts at improving Indian education have been focused on the kinds of compatibility that would prove efficacious

### Cognitive Theory

Research has focused around what is known as elaboration or the process of forming associations between new information and prior knowledge. For learning to occur, relevant prior knowledge in long-term memory must be activated, or made accessible, and the new information must undergo some form of processing that focuses on conceptual characteristics of the new information, such as its meaning, personal and social relevance, or relationship to prior knowledge and experience. Also, the greater the number of associations made between the new and the known, the more likely the new material will be retained and recalled.

Considering what is known from such studies, culturally based education would be superior to the extent that it activates existing culturally based schema, to which new abstract instructional goals can be related; to the extent to which cultural context facilitates encoding of new material in a meaningful manner and encourages more elaborative strategies.

### Cultural-Historical-Activity Theory (CHAT)

Language vocabularies and routines acquired by the learners through the processes of socialization through language exchanges and social activity as infants and young children are the primary cognitive tools for individual and group problem solving and

adaptation. Attitudes and values are similarly and simultaneously formed through those exchanges. Culturally-based secondary socialization processes such as schooling can be facilitated by activating the learners' cognitive and linguistic tools laid down by community socialization. CHAT also suggests positive learning outcomes when school participation structures are congruent with those in the learners' repertoires. Examples that have been widely studied include turn-taking, wait time, observational learning vs. trial-and-error, and various courtesies and conventions of conversation. All of these are represented as characteristic in AI/AN populations differ from the conventions of the school in the common tradition.

The relationship between culturally based education and academic achievement for Native American students is thus focused on teaching and learning strategies that provide access to the academic goals and objectives of the school through recognizing and building upon Native American student experience, values, and knowledge of the students and their families as developed within their families and communities.

The Center for Research on Education, Diversity & Excellence (CREDE) has developed what are known as the Five Effective Standards of Pedagogy which bring to life teaching practices that demonstrate some of what is known from the theoretical literature related to culturally based education. These standards of pedagogy are known to be effective particularly for culturally unique students but are also effective for other students as well.

#### Research:

As part of the feasibility study mentioned, William Demmert and John Towner conducted a literature review to identify experimental and quasi-experimental research on cultural based education and academic achievement. Experimental and quasi-experimental studies consider questions of causation. Experimental designs randomly assign subjects to treatment conditions by the researchers which minimally include a treatment group and a control group. Experimental research is preferred for questions of cause and effect. Quasi-Experimental designs are those in which the researcher has some control of assignment of subjects to treatments but can only work with intact groups such as a classroom or a school. There are a number of issues in implementing these designs particularly in education settings as it is often not feasible or reasonable to assign some students to a treatment group and not others and the time for results to occur may create changes in the composition of the groups and as with all designs valid measures of achievement are an issue.

The Demmert review started with more than 10,000 documents and found only four experimental studies and two quasi-experimental studies. The review found very little research on that level of rigor directly bearing on the question of the relationship of language and culture to academic achievement. Also, of the six experimental or quasi-experimental studies identified only two, a study by Roland Tharp, the King Kamehameha Early Education Program (KEEP) (1982) a reading program specifically developed for Hawaiian children and a study by Lipka and Adams, (2002) Improving Alaska Native rural and urban students' mathematical understanding of perimeter and area that tested the effectiveness of a culturally based unit of instruction on perimeter and

area on student learning of these concepts at the sixth grade level demonstrated a relationship of cultural based education to academic achievement.

The very small number of studies that demonstrate any causal relationship of culturally based education to achievement is an indication that experimental and quasi-experimental studies simply have not been done.

However there are a large number of studies in which groups are compared but there was no control over who got what and when, where groups are formed in a non random fashion. Many of these studies demonstrate potentially positive relationships between culturally based education programs and improved student academic, social, and cultural development but cannot be relied upon as studies to determine causation. It's noted the literature does not suggest the opposite to be true.

The achievement and education progress data of Native American students in school programs without culturally based efforts indicate that current education strategies are not efficacious for many Native American students.

#### Best Practices:

Dr. Theresa McCarty has developed a policy paper for The Promising Practices and Partnerships in Indian Education Working Group and the U.S. Department of Education "State of the Field: The Role of Native Language and Cultures in American Indian Alaska Native and Native Hawaiian Student Achievement"(January 2009). Dr. McCarty's report lists promising practices when the home language is not the school language; when a primary goal is Native language and cultural revitalization; and culturally based education/culturally responsive education.

#### Home language is not the school language

Rock Point: Rock Point has a program where separate but complementary time was devoted to learning in Navajo Language and to English, learning to read first in Navajo Language and then English. Longitudinal data from Rock Point show that students there not only outperformed comparable Navajo students in English-only programs, they surpassed their own previous annual growth rates and those of comparison-group students in BIE schools – and they did so by a greater margin each year

Rough Rock KEEP: the Rough Rock English-Navajo Language Arts Program served approximately 200 students each year in grades K-6. Classrooms were organized around learning centers and small-group instruction in Navajo and English. Curriculum centered on interdisciplinary units with local themes with annual summer literature camps that involved students, teachers, parents, and elders. The program had a strong professional development component, bilingual teacher initiated research and collaboration to "indigenize" the curriculum

## Results

Longitudinal data show that after four years in the program, students' mean scores on criterion-referenced tests of English comprehension increased from 58 percent to 91 percent. On standardized reading tests scores initially declined, then rose steadily, in some cases approaching or exceeding national norms. When data were analyzed over five years, students demonstrated superior English reading, language arts, and mathematics performance compared to a matched peer group who did not participate in the program. Students also were assessed as having stronger Navajo oral language and Navajo literacy abilities; they became stronger in both languages and had the benefit of additive bilingualism.

### Manokotak:

Manokotak is a Yup'ik speaking village in the Southeastern Regional School District where nearly all in the village spoke Yup'ik. The school that served the village was restructured. Beginning in kindergarten students received four hours of instruction in Yup'ik and one in English, progressively increasing English instruction to 4.5 hours by the fifth and sixth grades. The program used a holistic approach to language arts, building on students' home-community experiences as content for literacy development.

## Results

At the end of the program's initial year, kindergartners exceeded the district's expected means for their performance on standardized tests, while first and second graders achieved below expected means. By the second year, all student groups exceeded the district's expected means.

### Native Language and Cultural Revitalization

#### Nawahiokalani'opu'u Laboratory School

Nāwahī is a Hawaiian-medium, early childhood through high school affiliation of programs featuring a college preparatory curriculum rooted in Native Hawaiian language and culture teaching all subjects through Hawaiian language and values. English instruction begins in fifth grade with a standard English language arts course; students enroll in such a course every semester through grade 12. Elementary students also study Japanese, and intermediate students study Latin.

Nāwahī students not only surpass their non-immersion peers on English standardized tests, they outperform the state average for all ethnic groups on high school graduation, college attendance, and academic honors. The school has a 100 percent high school graduation rate and a college attendance rate of 80 percent.

#### Tsehootooi Dine Bi'olta

Tséhootsoóí Diné Bi'ólta' (TDB, The Navajo School at the Meadow Between the Rocks or the Fort Defiance Navajo Immersion School), is a full-immersion K-8 school, with

plans under way for an early college program and expansion through grade 12. In the lower grades, all instruction, including initial literacy, occurs in Navajo. English is introduced in second grade and gradually increased until a 50-50 distribution is attained by grade 6. TDB's program is organized to afford maximum exposure to Navajo, incorporating tribal standards for Navajo language and culture and state content standards.

#### Results

Longitudinal data from TDB indicate that Native-language revitalization has not come at the cost of children's acquisition of English or their academic achievement. Navajo immersion students consistently outperform their peers in English-only classrooms on local and state assessments of English reading, writing, and mathematics

In 2007 the principal at Tsehootooi Dine Bi'olta Maggie Benally, testified before the Committee on Health, Education, Labor, and Pensions, U.S. Senate Hearing on *No Child Left Behind: Improving Education in Indian Country* that from 2004 to 2007 the school had met the [AYP] required under NCLB, where other schools in the district were inconsistent. She told the committee that the educational goals for our children can be achieved by validating our educational needs - to ensure the survival of the unique Dine culture and language.

#### Puente de Hozho Dual Immersion

Puente de Hozho is a trilingual K-8 public magnet school in Flagstaff, Arizona offering two parallel bilingual programs: a conventional dual immersion model in which native Spanish-speaking and native English-speaking students are taught jointly for a half-day in each language, and one-way Navajo immersion in which English-dominant Navajo students are taught in Navajo. In the latter program, kindergartners receive 90 percent of their instruction in Navajo, with English instructional time gradually increased to 80/20 in first grade and 60/40 by third grade, until a 50/50 balance is attained in grades four through eight. All state standards are taught in Navajo and English or Spanish and English.

#### Results

Puente de Hózhó has consistently met state standards, with its students outperforming comparable peers in monolingual English programs by as much as seven points in English language arts, ten points in mathematics, and 21 points in English reading.

#### Culturally responsive education/culturally responsive schooling

Premised on the theory that the most influential factor in students' school performance is, in "how we teach and arrange social activity in schools," culturally based education incorporates Native Language and culture into the schools programs. Culturally based education is academically effective and locally meaningful in light of community members' aspirations for their children. CBE that is cultural in character is...more

powerful” and whole-school approaches are stronger than “add-on” programmatic interventions.

As part of the feasibility study, I reviewed 145 federally funded language preservation grants and 1,200 Indian Education Act formula grants and determined that there were five principal types of culturally based education programs. From this review I identified a random and purposeful sample of 164 culturally based education programs. The following are the categories of culturally based education that I identified

1. Culturally based instruction where the language of instruction is the Native language;
2. Native language instruction where the Native language is a subject of instruction;
3. Native studies programs that enhances the existing curriculum program around specific Native content such as history, civics or culture related content;
4. Native cultural enrichment which bring local community cultural events to the school or allow students to participate in community cultural events; and
5. Culturally relevant materials which add Indian related content to reading materials.

Within the sample of programs, the vast majority of programs were offered and in greater combination with each other in schools with 50-100% Native Student enrollment. These efforts remain for the most part programmatic in character. In other words they are offered as program interventions in an otherwise non-culturally based education school education program.

Demmert in the already mentioned literature review lists six critical elements of CBE. These are:

1. Recognition and use of Native American (American Indian, Alaska Native, Native Hawaiian) languages (this may include use bilingually, or as a first or second language).
2. Pedagogy that stresses traditional cultural characteristics and adult-child interactions as the starting place for one’s education (mores that are currently practiced in the community, and which may differ community to community).
3. Pedagogy in which teaching strategies are congruent with the traditional culture as well as contemporary ways of knowing and learning (opportunities to observe, opportunities to practice, and opportunities to demonstrate skills).
4. Curriculum that is based on traditional culture that recognizes the importance of Native spirituality, and places the education of young children in a contemporary context (e.g., use and understanding of the visual arts, legends, oral histories, and fundamental beliefs of the community).
5. Strong Native community participation (including parents, elders, other community resources) in educating children and in the planning and operation of school activities.
6. Knowledge and use of the social and political mores of the community



The research literature suggests that social linguistic approaches that are congruent with the student's home and community culture would have the greatest impact upon academic achievement and that school-wide efforts rather than programmatic interventions would be most influential.

#### The need for comprehensive Indian education plans

The Indian Education Act of 1972 Part A the formula grant program has as one of its main purposes "meeting the unique educational and culturally related academic needs of American Indian and Alaska Native students, so that such students can meet the same challenging State student academic achievement standards as all other students are expected to meet." The "so that" phrase potentially presents a research question. When I was serving as director of the U.S. Office of Indian Education (OIE) 1997-2001, the Office of Management and Budget (OMB) proposed a study to determine the relationship of the formula grant program to achievement. I argued at the time that the approximate \$150 per student now approximately \$300 per student available could never be considered influential on reforming schools no matter how correct the point of view or intention of the statute, and that many factors both within and outside the school's control impacted student achievement in complex ways.

Also there is a wide array of allowable activities possible which may predictably have varying degrees of direct impact on achievement but are valuable for other reasons. Also the statute does not describe what is a special education or culturally related academic need allowing this to be defined locally. For these reasons and others the Title VII Part A formula grant program may not present a researchable question related to achievement but may still be valuable for the educational experience of American Indian and Alaska Native children in that they may provide many important services or enrich the school curriculum.

Considering what we know about culturally based education, the one area that shows real possibility in the Title VII formula grant is the policy language that requires the development of a comprehensive Indian education plans (Section 7114 b). based upon a comprehensive local assessment and prioritization of the unique educational and culturally related academic needs of the American Indian and Alaska Native students, These plans require a description of how the best available talents and resources, including individuals from the Indian community will be used to meet the needs of Indian students and requires an assurance that the comprehensive program was developed in open consultation with the parents of Indian children and parents. The requirements of the statute for developing these plans would potentially result in state and local Indian education plans comparable and consistent with local and state education plans required under Title I as is required in Title VII Part A the formula grant program currently. The development of comprehensive plans as intended by statute is not occurring

If the required comprehensive plans were developed as required and with the same rigor as Title I state and local education plans, the entire array of resources available would potentially be focused on meeting "the unique educational and culturally related academic needs of American Indian and Alaska Native students in any local education

agency, so that such students can meet the same challenging State student academic achievement standards as all other students are expected to meet. The evidence on significantly improving the academic achievement of Native American students has been documented in many school sites where there is a comprehensive focus on the unique educational and culturally related needs of Native American students. The fact that this requirement is not being fulfilled may explain a great deal why we continue to see the results we have in the inability of schools to accomplish achievement and progress rates for American Indian student the same as all other students.

Benally, M. (2007, August 10). Statement of Maggie Benally (Navajo), Principal, Tsehootooi Dine Bi'olta (Immersion School). Testimony before the Committee on Health, Education, Labor, and Pensions, U.S. Senate Hearing on *No Child Left Behind: Improving Education in Indian Country*

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