A View Into the Native Paradigm Modern Science Viewed Through Native Eyes

A Presentation on Transcultural Education by Rose von Thater-Braan (Tuscarora/Cherokee)

The National Science Foundation has been unrelentingly proactive in its support of ethnic, cultural and gender diversity in the scientific community. Still today, participation by Native Americans in science and science education is barely measurable. How can the aspirations of the foundation translate into broader participation? A key element is a better understanding of the cultural differences that exist.

At the heart of the problem are two world views, each informs the practice of science and its role in society in a fundamentally different way. This difference has resulted in a cultural disconnect that triggers and nourishes misunderstandings and misperceptions on the part of both groups. One result is diminished interest among Native people to embrace science as currently delivered by Western educational and research settings. Western educational and research settings, on the other hand improperly attribute these behaviors to resistance or refusal, explanations that steer them away from self-examination. Responses by both groups preempt realization of the goal, broader participation, and its benefits to the scientific endeavor.

"Trans cultural communication, the practice of understanding and working where cultures relate and move across one another (trans cultural), as distinct from the intersection of cultures where they initially meet, (cross cultural) usually in opposition, can help bridge this divide.

"A View Into the Native Paradigm," originally developed as a workshop to bring an understanding of mainstream scientific culture to Native students and demonstrate for them, cultural differences and their effects on their educational process, owes its success to its reliance on trans cultural communication practices. For the National Science Foundation community "A View Into the Native Paradigm" will be offered as a conversation in which we will:

explore world views;

the borders between Western science and Indigenous knowledge; the disconnect between Native and non-Native cultures; and the barriers that limit participation by Indian students in mainstream generated education programs.

"A View Into the Native Paradigm," was initially presented at the National Aboriginal Career Symposium, sponsored by the Canadian Government, the Canadian Aboriginal Science and Engineering Association and the National Research Council of Canada