
QUALITY EDUCATION FOR MINORITIES (QEM) NETWORK
National Science Foundation (NSF) Tribal Colleges and Universities Program (TCUP)
Workshop on Culture and Curriculum for Faculty Teaching STEM Courses at
Institutions with TCUP Multi-year Awards
Embassy Suites Albuquerque • 1000 Woodward Place, NE • Albuquerque, NM • Tel. 505/245-7100

October 16-17, 2009

AGENDA

Purpose: To bring together STEM faculty at TCUP Grantee Institutions to discuss ways they might use/are using Native Culture to enrich the STEM courses they are teaching

Note: Participants are expected to take advantage each morning of the complimentary full breakfast available to all guests at the Embassy Suites Albuquerque.

FRIDAY, OCTOBER 16

AM

- 8:15 *Registration* *outside of La Ventana Room*
- 8:45 *QEM Welcome* *La Ventana Room*
 Shirley McBay, President, QEM Network
- Opening Prayer*
- Welcome to Albuquerque*
 Sherry Allison, Acting President
 Southwestern Indian Polytechnic Institute (SIPI)
- 9:00 *Workshop Purpose and Introductions*
 Shirley McBay, QEM Network
- 9:15 Panel: *Using the Knowledge of Tribal Elders, the Community, and Language*
 to Expand the Use of Native Culture in STEM Courses
Moderator: Holly Youngbear-Tibbetts, Dean, External Relations
 College of Menominee Nation, and QEM Consultant
Panelists:
 Robert Yazzie, Director, Diné Policy Institute, Diné College
 Linda Different Cloud-Jones, Ph.D. Candidate
 Montana State University, and QEM Consultant
 Alyce Spotted Bear, Instructor, Liberal Arts and Tribal Studies
 Fort Berthold Community College
- 10:15 *Break*
- 10:30 *Western and Native Ways of Understanding the Natural World:*
 Similarities and Differences
 Daniel Wildcat, Co-Director
 Haskell Environmental Research Studies Center
 Haskell Indian Nations University

11:00 Panel: *Enriching STEM Curricula at Tribal Colleges and Universities, Alaska Native-serving Institutions, and Native Hawaiian-serving Institutions using Native Culture*

Moderator: Gerald “Carty” Monette, Senior Advisor, QEM Network

Panelists:

Misaki Takabayashi, Assistant Professor, Department of Marine Science
University of Hawaii at Hilo
Kim Williams, TCUP Program Manager
University of Alaska Fairbanks–Interior Aleutians Campus
Daniel Wildcat, Haskell Indian Nations University

NOON/PM

12:00 Working Luncheon–Table Discussions: Review of Morning Session’s Topics ***Atrium***

1:00 Panel: *Promising Practices for the Integration of Native Culture into Mathematics, Biology, and Environmental Science Courses at TCUP Grantees* ***La Ventana Room***

Moderator: Costello Brown, Senior Associate, QEM Network

Panelists:

Linda Different Cloud-Jones, QEM Consultant
Gabriel Begaye, Chair, Department of Mathematics
Haskell Indian Nations University
Perry Charley, Coordinator, Diné Environmental Institute, Diné College

2:00 Plenary–Group Discussion: *Other Participants Share their Experiences in Advancing STEM with Native Culture*

Facilitator: Althea Burns, Associate, QEM Network

3:00 *Break*

3:15 *He Sapa Oyate: Geosciences Community at the Heart of Everything That Is*
Donna Kliche, Principal Investigator and Research Scientist III
South Dakota School of Mines and Technology

3:45 Concurrent Sessions: *Participants Identify Potential Strategies for Including Native Culture in the STEM Courses They Teach*

Session I: Faculty Teaching Mathematics

Facilitator: J. Arthur Jones, QEM Network

Session II: Faculty Teaching Biology/Environmental Science/Earth Science

Facilitator: Linda Different Cloud-Jones, QEM Consultant

4:45 *Reports from Concurrent Sessions on the Integration of Native Culture and STEM*

Facilitator: Holly Youngbear-Tibbetts, QEM Consultant

5:15 *Adjournment*

Dinner on Your Own

Overnight Assignment: Participants are to write a detailed description of how they plan to integrate Native Culture in at least one of the STEM courses they teach.

SATURDAY, OCTOBER 17

AM

- 9:00 *Participants Report on Strategies They Will Use to Include Native Culture in their Courses and Submit their Written Descriptions* **La Ventana Room**
Facilitator: Costello Brown, QEM Network
- 10:00 *A Native-centered Approach to Guiding Undergraduate Student Research: The North Dakota Tribal College Faculty Research Model*
Gerald “Carty” Monette, QEM Network
- 10:30 *Break*
- 10:45 *Involving TCUP Institutions in Research Collaborations that Address Native Concerns*
Daniel Wildcat, Haskell Indian Nations University
- 11:15 Panel: *Using Distance Education, the Internet, and Service Learning to Include Native Culture in STEM Curriculum*
Moderator: J. Arthur Jones, QEM Network
Panelists:
Lucas Miller, Mathematics Instructor, Haskell Indian Nations University
John Rand, Professor, Department of Mathematics and Science
University of Hawaii-Kapiolani Community College
Charles Jason Tinant, Principal Investigator, NSF TCUP Phase II Program
Oglala Lakota College

PM

- 12:15 *Working Lunch* **Atrium**
- 1:15 *How to Evaluate the Effectiveness of Native Culture-enriched STEM Courses* **La Ventana Room**
Holly Youngbear-Tibbetts, QEM Consultant
- 2:00 *Talking Circle*
Facilitator: Gerald “Carty” Monette, QEM Network
- 2:30 *Adjournment*