Technological_Curriculum & culture

Abstract:

This article explores First Nations (Native American) science education from a cultural perspective. Science is recognized as a subculture of Western culture. Scientific and Aboriginal ideas about nature are contrasted. Learning science is viewed as culture acquisition that requires First Nations students to cross a cultural border from their everyday world into the subculture of science. The pathway toward the cross-cultural education explored in the article is: (1) founded on empirical studies in educational anthropology; (2) directed by the goals of First Nations people themselves; (3) illuminated by a reconceptualization of science teaching as cultural transmission; (4) guided by a cross-cultural STS science and technology curriculum; and (5) grounded in various types of content knowledge (common sense, technology, and science) for the purpose of practical action such as economic development, environmental responsibility, and cultural survival. Cross-cultural instruction requires teachers to identify cultural border crossings for students and to facilitate those border crossings by playing the role of tour guide, travel agent, or culture broker, while sustaining the validity of students' own culturally constructed ways of knowing