

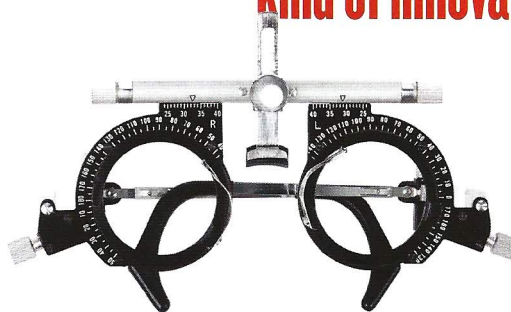


## Integrative science

# The gift of multiple perspectives in scholarship

by Cheryl Bartlett

**“Within academe, the shoals are poorly charted for this kind of innovation.”**



**T**HE INTEGRATIVE SCIENCE program at Cape Breton University has certainly “gone against the grain of its ‘home’ discipline” in bringing indigenous ways of knowing into postsecondary science programming, as Peggy Berkowitz noted in her editorial in the January issue, comparing this to the lyric scholarship movement. I then read with delight the article by Anita Lahey, “Academic papers get poetic.”

A piece of integrative science (or IS) research that connects well with the thoughts expressed in both the editorial and the article is the work of poet and IS research fellow Marilyn Iwama (now an adjunct professor at the University of Northern British Columbia), who used lyric inquiry in crafting *I Got It From An Elder: Conversations in Healing Language*. The book’s publisher calls it “a poetically shaped collage of conversations about the healing tense in the Mi’kmaq language, and an attempt to integrate Indigenous and Western ways of knowing.”

Since the IS academic program was implemented at CBU in 1999 (and the focus of a cover story in *University Affairs* in December 2001), it has achieved a great deal, but it also has encountered many challenges.

Among its achievements, 27 Mi’kmaq students – all with some relationship to IS – have graduated with a science or science-related degree at CBU (fewer than five without IS affiliation have ever graduated); 13 are graduates from the four-year BSc community studies degree, IS concentration. Most now hold key positions (school principal, research scientist or

assistant, job coach, natural resource manager, nurse, teacher) in their communities. Some Mi’kmaq students who started with IS courses have graduated with a BA or BACS degree while others have left university, a few with intent to return. Mi’kmaq IS undergraduates have presented at academic conferences in Canada and internationally. Thirteen NSERC undergraduate summer research awards went to Mi’kmaq IS students. Up to 2007 and in total, about 100 Mi’kmaq students experienced first-year IS courses, many recruited by the Mi’kmaq Science Advantage Program run by CBU’s then Mi’kmaq College Institute.

Within academe, the shoals are poorly charted for such innovation. The IS program met diverse challenges from the outset – including inconsistencies and insufficiencies at the administrative, faculty, budgetary and recruitment levels – and has floundered in recent years. Since 2007, there has been no new enrolment into the program. Only first-year IS courses are being offered, and they have shifted to fundamentals of science within BA access programming (meritorious in its own right yet not the original IS vision).

I believe it essential to find better ways to enable collective stewardship and participation by interested Elders, educators and others from the aboriginal community, alongside constructive and critical institutional input. Consultation with Elders, wherever traditional aboriginal knowledge has a role, is congruent with formal recommendations made by Elders from Mi’kmaq, Wolastoqiyik, Innu and Inuit communities in

Atlantic Canada and approved by the Atlantic Chiefs in September.

Meanwhile, the last decade has seen enormous expansion in the horizons of interest and application for understandings emergent from IS research. Albert Marshall has brought forward the guiding principle of “Two-Eyed Seeing” which encourages learning to see from one eye with the best in the indigenous ways of knowing and from the other eye with the best in the mainstream ways of knowing, and most importantly, learning to see with both eyes together – for the benefit of all.

This gift of multiple perspectives – an integrative approach! – is treasured by many aboriginal peoples, and I have witnessed immediate resonance of the concept with Elders all across Canada. Significantly, Two-Eyed Seeing was adopted in the business case prepared by CIHR’s Institute of Aboriginal Peoples’ Health for programming in its next five-year plan. Two-Eyed Seeing (by that name) is in diverse other places, including collaborative environmental planning in Cape Breton, Mi’kmaq schools in Nova Scotia, land-based summer camps in Nunavut, species-at-risk draft policy in Ontario, and global celebrations for the International Year of Astronomy 2009.

Two-Eyed Seeing and co-learning are congruent with emerging theory for trans-disciplinary research, and I firmly believe they, along with the travelling companion of integrative scholarship in its many forms, represent the way forward for innovation akin to that of IS in academe and beyond. **UA**