

What the mining debate is missing

January 5 2012, By Jennifer Donovan



An open pit iron ore mine.

As mining is resurging in North America, debates across the continent over mines are simplified: “Do we prioritize jobs or the environment? Companies or communities?” These are worthy debates. Yet should the issue of mining really be reduced to “pro-con” statements?

Michigan Technological University experts from a wide range of disciplines say no. “The worst type of communication has to do with the simplification of the mining issues. I think the biggest problem is creation of polar opposites so that one has to choose between employment or environmental and health protection” says Carol MacLennan, an environmental anthropologist at Michigan Tech who has studied mining communities for almost a decade. “Characterizing it that way is very destructive because you're never forced to confront the complexity of the issue.”

Ted Bornhorst, director of Michigan Tech's A.E. Seaman Mineral Museum and a mining geologist for more than 30 years, emphasizes that no one in modern society can deny their use of mining products. "Probably the biggest frustration in the mining controversy," Bornhorst says, "is the complete, absolute disconnect that most people have between mining and their lives." Consequently, Bornhorst believes there is a fundamental need to include more geology in pre-college education.

Even while acknowledging our dependency on mining products, are scientists sufficiently communicating issues of demand and reuse? MacLennan has noticed a gaping hole in the mining debate over the past decade: "What's not articulated, not debated and not discussed is whether or not we have other means of obtaining these metals through a recovery or recycling process... Most people don't really know what's out there and how technologically capable we are of recovering or not recovering these metals from other products."

This raises an important question: How are members of the general public expected to understand such a complex issue? Answers from Michigan Tech scientists focus on two solutions: education and improved communication between scientists and the public.

According to Craig Waddell, an associate professor of humanities who has studied public participation in environmental disputes, "If you want to prepare a broader range of people to participate, they need to know how to address scientific arguments, how to assess disputes within the scientific community, what counts as evidence and how we evaluate whether or not that evidence is valid."

MacLennan believes that scientists have an obligation to communicate with the public: "Too often, scientists think about things in terms of 'furthering knowledge,' and that, by implication, is a public good. It's just that it's often not clear—how is it a public good? How is it

publically useful? And you have to always be thinking about different publics—and there are different publics— how are they interested or concerned in the particular work you’re doing?”

Existing mechanisms may help to bridge the science-public divide. MacLennan calls for better “access points” for opportunities for communication between scientists and the public when decisions involve risk. She offers the example of “science shops” in northern Europe: “A citizens’ group goes through a quick education process on the subject by members of the scientific community, and then they come up with recommendations.” The process is a serious attempt to improve scientist-public communication and includes public involvement in decision-making and in the regulatory process.

Regardless of their form, meaningful discussions will not happen overnight: they inherently involve process. The first step toward improving communication about controversial issues, such as [mining](#), is to move beyond simplistic dichotomies. Scientists, educators and the public undoubtedly have their work cut out for them. But there is good news: opening avenues of communication can begin to bridge existing gaps between scientists and the publics they serve.

Provided by Michigan Technological University

Citation: What the mining debate is missing (2012, January 5) retrieved 8 July 2024 from <https://phys.org/news/2012-01-debate.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.