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TABLE OF CONTENTS

Executive summary	
Background	1
Purpose of the Event	1
Recommendations from AMEF Discussions	1
Introduction	2
Aboriginal Communities and Mining	2
Current State of Aboriginal Education	3
Overview of MiHR and the Aboriginal Mining Education Forum	3
Educational Success to Employment	4
Key Challenges Discussed through Facilitated Break-out Circles	5
Introduction to the Break-out Circles	5
Summary of Break-out Circle Discussions	6
(1) Holistic Support Systems for Education and Employment	6
(2) Family Preparation and Information	7
(3) Qualifications and Skills Recognition	9
(4) Providing Comprehensive Career and Industry Awareness	10
(5) Flexibility and Innovation	11
(6) Building Community Capacity	14
Inspiring Ideas and Observations	17
The Ripple Effect: Taking Action	19
Recommendations	20

EXECUTIVE SUMMARY

Background



Human resources (HR) challenges are one of the greatest threats to the future competitiveness of the Canadian mining industry. The Mining Industry Human Resources Council's (MiHR) most recent analysis shows the industry will require over 140,000 new workers over the next decade; that 40 per cent of workers are at least 50 years old; and that one-third of the mining workforce will be eligible to retire by 2015. This combination of demographics and retirement trends translates into a critical labour shortage for the industry in the next two to five years.

Aboriginal peoples are a key source of talent for exploration and mining employers, in the face of these imminent skills shortages. Many mining activities occur in close proximity to Aboriginal communities. Consequently, many companies and communities have formal and informal agreements governing

the social, environmental and economic impacts and benefits of projects, and the mining industry is the largest private-sector employer of Aboriginal peoples in the country.

However, a significant challenge in meeting mining employment targets stems from the fact that many Aboriginal people lack the formal education and training required for positions within the sector. The reasons for low secondary and post-secondary graduation rates among Aboriginal populations are numerous. The challenges associated with support systems, motivation and career awareness were defined through a short survey of potential delegates prior to the Aboriginal Mining Education Forum (AMEF) as key topics for discussion.



Purpose of the Event

The Aboriginal Mining Education Forum (AMEF) brought together representatives from Aboriginal organizations, education, mining and mineral exploration, and government for a strategic and culturally appropriate networking event. The Forum aimed to improve understanding of the issues related to Aboriginal education, as they apply to HR management in mining and mineral exploration, and to the economic development of Aboriginal communities (First Nations, Métis and Inuit). Delegates were involved in a collaborative experience — where ideas, information and contacts were shared. The AMEF was developed to not only identify barriers and solutions for individuals on their educational and employment journeys, but to empower and encourage delegates to take action after the event.

Recommendations from AMEF Discussions

- (1) Build trust through cross-cultural understanding.
- (2) Listen and build customized solutions based on each community's needs.
- (3) Develop connections early among education, industry and communities to inform and support Aboriginal learners in their pursuit of careers in mining.
- (4) Examine and improve basic needs essential for education, such as infrastructure, transportation, communication and literacy.
- (5) Critically examine pre-requisite requirements for post-secondary programs and company recruitment policies that may be systemically creating preventable barriers for education and employment entry.
- (6) Provide flexible work and educational opportunities that take the family unit into consideration.

INTRODUCTION

Aboriginal Communities and Mining



The mineral exploration and mining industry is the number one private-sector employer of Aboriginal peoples (First Nations, Métis and Inuit) in Canada.¹ Nearly 8 per cent of mining's labour force self-identifies as Aboriginal, — far above the rate of participation in the rest of the Canadian labour market, at about 4 per cent. However, the majority of Aboriginal peoples employed in the industry are engaged in semi-skilled or labourer occupations.² The sector under-performs compared to the rest of the labour market in inclusion of Aboriginal peoples in knowledge worker roles —

defined as individuals with highly skilled college and university educations.³ Improving the opportunities for post-secondary education and development of Aboriginal workers skills' is a core objective of the industry as it strives to meet the challenges of the looming labour shortage.

Human resources challenges are one of the greatest threats to the future competitiveness of the Canadian mining industry. The Mining Industry Human Resources Council's (MiHR's) most recent analysis shows the industry will require over 140,000 new workers over the next decade; that 40 per cent of the industry is at least 50 years old; and that one-third of the workforce will be eligible to retire by 2015. This unfortunate combination of demographics and retirement trends translates into a critical labour shortage facing the industry in the next two to five years.

Aboriginal peoples are a key source of talent for exploration and mining employers, as they face skills shortages in the near future. The majority of mining activities occur in close proximity to Aboriginal communities and the industry is a major employer of Aboriginal peoples. "With almost half of aboriginal people under 25, native youth can help to fill this gap, but only if they're empowered with the skills and education to meet the need."



- ¹ Mining Industry Human Resources Council, Canadian Mining Industry Employment and Hiring Forecasts 2010 (2010), p. 25.
- ² MiHR, Making the Grade: Human Resources Challenges and Opportunities for Knowledge Workers in Canadian Mining (2011), www.mihr.ca/en/resources/MiHR_Making_the_Grade_Report_WEB.pdf.
- ³ Ibid.

⁴ D'Arcy Levesque, "Why aboriginal education is our business," The Globe and Mail, June 22, 2011, retrieved from: http://www.theglobeandmail.com/commentary/why-aboriginal-education-is-our-business/article58.

In an age of complex mining conditions, stringent regulatory environments and technology advancements, the sector employs a large proportion of highly skilled and educated talent. Developing this important knowledge-worker talent in local communities is not only critical to the long-term competitiveness and economic sustainability of the mining industry, it is also essential to the socio-economic development, independence and sustainability of Canada's Aboriginal communities.

Current State of Aboriginal Education

A report from Human Resources and Skills Development Canada (HRSDC) reviewed Statistics Canada data from the 2006 census and found that the age-appropriate proportion of Aboriginal people without a high school diploma was 34 per cent, compared to 15 per cent of the non-Aboriginal population of the same age group. Fewer still had completed post-secondary education. Only 8 per cent of the Aboriginal population reported completing a university degree, compared to 23 per cent of the non-Aboriginal population.⁵

"It is rare to find unanimity on any topic in the realm of public policy. When it comes to Aboriginal education, however, the now overwhelming consensus [is] that improving educational outcomes is absolutely critical to the future of individual Aboriginal learners, their families and children, their communities, and the broader Canadian society as a whole."

Overview of MiHR and the Aboriginal Mining Education Forum

Canada's Mining Industry Human Resources Council (MiHR) is an industry-driven organization that collaborates with a wide spectrum of the industry's stakeholders, which include Canadian mining employers, organized labour, educational institutions and Aboriginal communities. Our collective goal: to develop and implement solutions to address the industry's national human resources (HR) challenges.

MiHR's Aboriginal Mining Education Forum (AMEF) was developed as a first collaborative step in a broader strategy aimed at increasing Aboriginal success rates in education, leading to careers in mining. The Forum brought three essential groups to the table to network, share and collaborate: Aboriginal organizations, education and industry, as well as government representatives.

Forum Objectives

- Create an opportunity where best practices and information can be shared among Aboriginal educators;
- Increase enrollment and graduation rates of Aboriginal peoples in mine-related programs of study; and
- Increase successful partnerships among industry, education and Aboriginal communities to improve Aboriginal education outcomes that facilitate employment.



⁵ "Indicators of Well-being in Canada: Learning — Educational Attainment, Human Resources and Skills Development Canada", retrieved from http://www4.hrsdc.qc.ca/.3ndic.1t.4r@-eng.isp?iid=29#M_2

⁶ Standing Committee on Aboriginal Affairs and Northern Development, No Higher Priority: Aboriginal Post-Secondary Education in Canada, 39th Parliament, 1st Session (Ottawa: 2007), http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=2683969

EDUCATIONAL SUCCESS TO EMPLOYMENT



For many Aboriginal communities, the mining industry is unknown and/or poorly understood. By engaging Aboriginal communities in the mining education process, education can be constructed inter-culturally to help mining be more widely understood. Increased and improved consultation will help clarify the specific needs of communities and of industries, so individuals can better understand their potential and access better training.

The foundational differences in worldviews between industrial and Aboriginal cultures create challenges that are beyond the practical obstacles of training and education. Learning to "walk in two worlds" is common to many Aboriginal people who engage in "Western" education and employment. Acknowledgement of that challenge is essential. The AMEF's keynote speaker, Glenn Nolan, Vice President, Aboriginal Affairs, Noront Resources, and President of the Prospectors and Developers Association of Canada (PDAC), acknowledged this challenge, while stating that it is possible to "have your feet planted in both worlds."

To be successful, Aboriginal peoples will need guidance from Elders and from other Aboriginal people who have been able to find a balance between their traditional ways and mining culture. The benefits of learning to balance these two perspectives should be highlighted and these messages should come from within Aboriginal communities. Bringing community members and Elders to mining sites and having company representatives spend more time in communities to gain a better understanding of cultures can be very beneficial to the education-to-employment journey.

Providing access to Elders and mentors on-site during education and employment can help the individual transition between community, education and employment. Giving new employees the chance to seek guidance from their Elders on an on-going basis and to share their stories with other community members and youth, legitimizes their experience and links their co-existing value systems — helping individual learners to strengthen their own identity, feel empowered and inspire others.



KEY CHALLENGES DISCUSSED THROUGH FACILITATED BREAK-OUT CIRCLES

Introduction to the Break-out Circles



Before developing the AMEF, MiHR circulated a questionnaire with the help of partners representing the target groups for the Forum. The purpose was to better inform the development of the event and identify themes that required significant attention. Based on the information gathered, it was clear that the themes of Motivating Learners, Support Systems, and Career and Industry Awareness were paramount.

To generate meaningful discussion on these topics, MiHR identified three facilitators to lead a "Break-out Circle" for each topic. Delegates prioritized their interest in Break-

out Circle themes and participated in the conversation around their first or second choice at the event. Each facilitator guided their group through a discussion of the subject, with the support of at least one Métis, Inuit or First Nations Elder, and helper(s). The Social Sciences and Humanities Research Council (SSHRC) contributed funding for the hiring of student researchers to record and synthesize the conversations of each Break-out Circle.



Break-Out Circle: Motivating Learners

Facilitator: Maria Wilson, Inuit Tapiriit Kanatami (ITK)

Elder: Sally Kate Qimmiunaaq Webster, Inuit cultural expert who provides Elder support to groups in

Ottawa and Baker Lake

Helpers: Catherine Peltier-Mavin, Natural Resources Canada (NRCAN) and Melanie Sturk, MiHR **Student Researchers:** Kelsey Jansen, University of Alberta, and Robin Westland, Queen's University

Break-Out Circle: Increasing Awareness of the Industry and Career Options

Facilitator: Michael Fox, Prospectors and Developers Association (PDAC) and Fox Consulting

Elder: Reta Gordon, Executive Senator of the Métis Nation of Ontario

Helpers: Lesley Williams, PDAC, and Alana Kennedy, MiHR

Student Researchers: Kirsten Robinson, University of Waterloo and Hereward Longley, Memorial

University of Newfoundland

Break-out Circle: Setting Support Systems

Facilitator: Roberta Hewson, Aboriginal Human Resource Council (AHRC)

Elders: Rene Gravelle, Senator for the Sudbury Regional Métis Council, and Julie Ozawagosh, currently the

Elder for the Northern Ontario School of Medicine (NOSM)

Helper: Lindsay Forcellini, MiHR

Student Researchers: Jodi Stonehouse, University of Alberta and Anne Johnson, Queen's University

Several common discussions and themes emerged from the Break-out Circles. Key points from those conversations are summarized below.

Summary of Break-out Circle Discussions

(1) Holistic Support Systems for Education and Employment

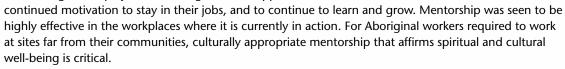
Aboriginal students tend to view learning as a lifelong process. Understanding students' worldviews facilitates a deeper understanding of how they learn. In their conversations about lifelong learning, delegates agreed that industry, education, communities and governments all have a role to play in supporting the learner, and they put forth quidelines on key areas of focus.

Mentorship: The concepts of mentorship and relationship-building were raised by many delegates throughout the Aboriginal Mining Education Forum (AMEF) and specifically, within the Motivating Learners Break-out Circle. Delegates identified a need for strong mentoring relationships for Aboriginal learners on three key levels throughout their journeys: communities, education and employment.

At the community level, guidance from Elders and community leaders was identified as extremely important for the success of an individual, as well as essential for individual empowerment and identity.

Within the education system, particularly at the postsecondary level, mentorship from staff and students at more advanced levels has been shown to increase the success of Aboriginal students within existing mining programs.

In terms of employment in the industry, delegates stressed the critical role played by strong mentors, who provide new Aboriginal employees with the guidance, support and



Building Relationships with Learners: Many existing education programs have achieved success with Aboriginal learners through daily communication with students, goal-setting exercises, personal counselling and other forms of academic and non-academic support. This approach to relationship-building could be applied in mining workplaces and at the community level as well, furthering the concept of multi-level support systems. Relationship-building at the individual and organizational level can help learners to proactively overcome challenges — and building these relationships early on will ensure that as problems arise for an individual, the supports and tools to help them cope are already in place. Providing supportive cultural environments that motivate learners and build their self-esteem is also an integral part of learning and training.



Alcohol and Drug Abuse: In some Aboriginal communities, addiction and substance abuse are social challenges; this is also important to consider in developing education, training, employment and career-awareness programs. Providing support to learners, employees, families and communities with respect to these social issues can help lay the groundwork for healing and motivation to create financial independence. Community support and encouragement can help a learner to stay motivated. Ensuring that systemic issues related to education and other social challenges in Aboriginal communities are addressed will provide individual learners with the tools and support required for success.

Communities Must Be Part of the Solution: Aboriginal Elders, community leaders and educators all expressed the view that no approach will succeed unless families and communities are consulted and encouraged to become partners in the success of their members. Communities must be part of the design and implementation of supports; they are the keepers of the traditional knowledge and are well placed to provide the spiritual and cultural support that promotes success. While Western societies focus on the individual, indigenous cultures value community. Clearly, an individual learner's success benefits the collective.



(2) Family Preparation and Information

In the Forum's opening remarks, speakers noted that many Aboriginal students in post-secondary mining programs are enrolling many years after completing high school. According to educators, many of these learners have families of their own to support as they study; therefore, promotion of family literacy is advocated as part of a strategy to support adult learners. Delegates agreed that a shift in focus from success of the individual learner to success of the family is likely to produce greater benefits.

Elders recounted stories illustrating that families are also a great motivator for success. Community educators noted that in the case of younger learners in particular, families often want to be involved, and that these young people have a greater likelihood of success if they can remain connected to family supports.

Involving the Family: Delegates of the AMEF identified other major obstacles to Aboriginal participation in the mining labour force — family responsibilities, and the challenges of being away from home for work and school.



It is important to note that while young people need family support, youth also perform an important role in their community, particularly where the community lives off the land. Young people may feel a conflict of responsibilities with regards to their role in hunting and helping to provide for the community, and their opportunity to train for work.

These issues produce stresses for an Aboriginal person starting a career in mining and these stresses, in turn, put strain on the family circle. Such strain was one of the reasons cited for the low involvement of Aboriginal peoples in the industry. Delegates suggested several approaches to address these issues, including the need for increased provision of family-support networks.

For example, initiatives could be developed to help learners and their families cope with the changes in lifestyle that accompany further education and full-time work away from home. Delegates from a range of mining organizations and educational institutions spoke of the value of bringing family members to school or the workplace, to help them better understand their relative's "new life" and to more readily empathize with his or her experience and day-to-day routines. In situations where stress stems from a family's cultural bias against the mining industry — leading to tensions between mining and non-mining members of the family unit — a visit to the work site would not only allow family members to better understand one another's life situation, but would also form a bridge between the mining industry and Aboriginal communities in general.

Anticipating the Impacts of Change: It was also suggested that families be provided with training and preparation for the changes that will come with their family member's education or new career in the mining industry. In many cases, the socio-economic impacts of increased income can be challenging. If people are unprepared to manage their new finances or to deal with the stress of single parenting when their partner is away, this opportunity may result in more problems at home and ultimately cause the learner/worker to abandon his or her path. To make these kinds of transitions easier, AMEF delegates recommended courses or counselling customized to Aboriginal needs, to help families with stress management.

Childcare: Another obstacle identified by delegates was the lack of adequate childcare within many Aboriginal communities. As many mining activities require travel away from the home community, concern about proper care of their children back home can be a deterrent to both working in the mining industry and taking the required training. A number of educational institutions have implemented an effective solution — in-community training delivery through mobile classrooms or virtual learning. Additionally, this challenge can be further mitigated by ensuring that home communities have adequate and affordable childcare facilities for workers involved in the mining sector.

(3) Qualifications and Skills Recognition

Delegates from many Aboriginal organizations discussed systemic issues within the elementary and secondary education systems. Aboriginal representatives frequently mentioned below-average graduation and literacy rates, due to such factors as lack of infrastructure and qualified educators, and use of non-Aboriginal teaching methods. These issues need to be addressed in both the short and long terms to increase employment of Aboriginal people in mining because for many companies, a high school diploma is a pre-requisite for being hired. For many Aboriginal people, this requirement automatically disqualifies them from pursuing employment or further training without going back to school. Forum delegates asked: Are there alternatives?



Learning Assessments: Use of tools for assessment of learning at all levels was suggested as one potential way to deal with these systemic issues in the short term. If learners at primary, secondary and post-secondary levels are assessed to determine their individual learning needs, their chances of success will dramatically increase. A number of delegates spoke of the stigma associated with having a learning disability; parents and students may shy away from having an assessment done because of fears about being seen as less capable in the eyes of others. These fears are not unique to Aboriginal people but some delegates from Aboriginal organizations said that these stigmas are still very pronounced in many Aboriginal communities — while mainstream Canadian society is becoming more accepting of the fact that people learn differently. Community outreach programs around learning assessments and learning disabilities may also provide the appropriate information to allow learners and their families to begin to overcome these stigmas.

Recognition of Transferrable and Traditional Skills: Aboriginal learners come to the table with a set of skills and knowledge that may not be formal or accredited but as AMEF delegates stressed, these attributes are highly valuable. Problem-solving, working in a team environment, navigation skills and other qualities that a person who lives off the land may possess are beneficial and transferrable skills. These life skills can prepare a person not only for meaningful work, but also for a meaningful life. However, a number of delegates — predominantly Aboriginal representatives — expressed concern that many young Aboriginal learners may be lacking these essential skills. Training in these soft skills, before post-secondary education in mining, was suggested as one way to address this concern.

Linking back to the assessment discussion — identification of the skills an individual may possess through traditional, land-based knowledge would help boost the person's confidence. Many delegates discussed the value of recognizing soft skills and they suggested a process of accreditation for such skills, to provide acknowledgement of individuals' achievements and qualifications.

Formal Education: A second discussion theme with respect to skills recognition was the lack of uniformity across the country for academic credentials. This links to some of the systemic issues mentioned earlier — the idea that Grade 12 in one community does not equal Grade 12 in another was raised many times in the Forum. Some delegates also pointed out that certain companies require a minimum education of Grade 12 for an entry-level mining position. Delegates discussed the fact that a Grade 12 curriculum may not necessarily be in-line with employment criteria. One suggestion was development of a national standard for entry-level mining requirements, with a focus on soft and transferrable skills.



(4) Providing Comprehensive Career and Industry Awareness

While there is a wide range of employment opportunities in the mining industry, Aboriginal people often do not know that these opportunities exist or how diverse they are. If people do not know about alternative ways to engage, they may miss the opportunity to benefit from working in the mining sector.

The Careers: The availability and diversity of mining employment and training opportunities need to be extensively promoted to Aboriginal communities. It is also important to overcome stereotypes about what mining jobs involve and about what kind of person is suited to work in a mining operation. In addition to underground mining jobs, there is a range of opportunities with companies, including many supply and service jobs.

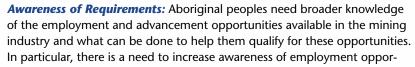
Mining 101: Aboriginal representatives also emphasized the need to structure Aboriginal education to teach youth about the total mining cycle, resource-development history, Aboriginal rights to consultation, treaty rights, Impacts and Benefits Agreements (IBAs), and environmental law and assessment. Educating Aboriginal youth about the various facets of the mining industry and about the industry's relationships with Aboriginal communities in Canada, will help them learn about possible career paths, as well as about the roles and rights of their community. This will help members to become active, prepared and informed participants if and when mining development occurs in their community.

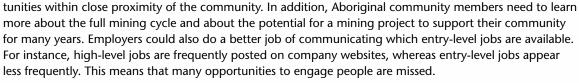
Early Preparation: Education representatives in the Forum stressed the importance of training Aboriginal people in advance of a planned mine opening, so that they can be ready to work when development occurs. This requires advance awareness of potential career paths and improved early education initiatives,

designed in part to provide community members with employable skills. Jobs need to be matched to people, and there needs to be better collaboration between communities and industry HR departments. Non-monetary resources include supports that send the message that the community, educational institutions, governments and companies care about individuals and their success.

Addressing Historical Perceptions: The mistrust of the conventional education system among many Aboriginal peoples is considered a lingering result of the residential school system. This means that there can often be community resistance to formal education. As well, the environmental impacts of some

mining activities in the past have fostered negative perceptions of the industry. In order to overcome these historical hurdles, delegates suggested that Elders be given the opportunity to learn more about what the mining sector can offer their communities — in terms of financial security, personal empowerment and community development. Another proposal was to inform Elders about the advances that mining has made in environmental protection and reclamation. The practice of bringing community members and Elders to mining sites is becoming more commonplace. This broadlevel community engagement allows people to better understand how the mining industry operates and what the work environments are like. Over time, this engagement can help shift peoples' perceptions of contemporary mining careers.





Altering Perspectives: Aboriginal community members stressed that it is important for people to feel confident that opportunities are within reach, for example, by seeing that others in the community or surrounding communities have benefited from employment in mining. Promoting role models can show youth that they too can achieve their education to employment goals.

Mining development takes place over a lengthy period of time, and mining needs to be promoted as the avenue to a long and rewarding career. Some people may have an outmoded view of the type of work done in today's mines and may not see these jobs as desirable. Advertising some of the modern mine's high-tech activities — including robots, advanced technology, GPS mapping and remote operations — can help show the work is exciting. Unexpected partnerships such as developing a film institute of the North or starting a new television show might also help to engage different groups and individuals in the available opportunities.

(5) Flexibility and Innovation

Creating change requires flexibility and adaptations to the usual way of operating. Delegates provided several suggestions for making work and education more adaptable, in ways that will benefit and increase the involvement of Aboriginal people in mining, while having a neutral or positive impact on the workforce at large.

Earning while Learning: Industry and Aboriginal representatives made the point that it requires investment to support people to continue with their education. This is especially important if learners do not have strong support networks in the communities in which they are studying. Even if a learner's tuition is covered, they may find it very difficult to get the resources to live on. There is already a great deal of evidence that a blended model promotes success for adult learners. One Elder stated that knowing that a real job, with dignity, awaits a learner is a powerful motivator. This Elder advised that learners spend part of their time in the workplace becoming familiar with its atmosphere, activities and culture, so they would gradually see themselves fitting in. Blending the training period with time to work and earn money was reported to be an effective way to build self-confidence and to help learners envision their roles as productive workers. Participants from all groups offered their experience with apprenticeship-like approaches to learning, noting that students are better motivated by having a mix of classroom time with hands-on practice and workplace time.



Culture and the Security of Community: Aboriginal representatives advocated improvements to culturally appropriate education. They believe higher success rates for learners can be achieved through more education in Aboriginal languages, culture and community histories, and by use of curriculum materials generated by communities, as well as by official boards of education.

Enabling students to learn while in the cultural security of their own community — without uprooting them from all that is familiar — is often a successful approach. In this way, the learner avoids the culture shock and isolation of moving to a new and larger community, while at the same time taking on a new role. In addition, students who are parents avoid the anxiety of placing their young children with strangers, while they are away at school. A couple of Aboriginal educators noted that Aboriginal youth tend to have children at younger ages than other population groups; these extra family responsibilities for young people are another barrier to learning. Creativity and flexibility around issues related to family responsibilities are key to development of effective support systems.

Training cannot always be practically delivered in a remote Aboriginal community. One Aboriginal community-development worker suggested that a practical approach to the problems of culture shock and homesickness is to provide funding for learners to make a mid-term visit to their home. For some

communities where access is only by air, these travel costs may seem prohibitively expensive — but delegates noted that a visit home might make the difference between a student persevering and dropping out from despair. Another Aboriginal educator said his organization had found that help with finances often made the difference between a student dropping out and succeeding.

Examining the Issue of Criminal Records: According to Correctional Service Canada, "Adult Aboriginal people are incarcerated more than six times the national rate." Criminal records deny access to employment opportunities. This is an issue that is closely connected with the poverty, poor infrastructure, housing and living conditions in many remote Aboriginal communities and urban settings. Delegates also presented examples of "criminalized advocacy," in which people had criminal records because of involvement in protests for Aboriginal rights. They advocated that employers create more flexible rules on criminal records to allow certain people to work despite having a record. For example, employers could consider the difference between an individual who was convicted for peacefully opposing development on their traditional lands and another individual who has been convicted of aggravated assault.

Fighting criminal charges and obtaining pardons are very difficult for communities that are often short on legal services and the finances to pay for them. Delegates at the AMEF advocated for an improved, more efficient system for pardons. Additionally, more progressive sentencing for Aboriginal peoples may help to address the disproportionate numbers of Aboriginal peoples in the prison system. Overcoming criminal barriers to employment can help to create better futures for many Aboriginal community members.



Flexible HR Policies: Aboriginal peoples often come from cultural backgrounds that differ greatly from the culture of "mainstream Canada." They commonly have a more integrated relationship with natural-resource harvesting for subsistence and income; often, individuals want to supplement — but not to forfeit — their hunting and fishing yields with employment. Industry and Aboriginal representatives at the AMEF said that many youth ask about how they will attain an adequate worklife balance. How will they be able to spend time with their families while they are training? How much time will they be able to spend on the land? How much time will be allowed for transportation to and from their community? What will this cost? Industry representatives pointed out that some women, for instance, leave the industry at mid-career to achieve a better balance between work and life. Delegates advocated for progressive policies that recognize cultural differences and

allow Aboriginal employees to maintain a traditional lifestyle while working in the mining industry. More generally, it is important for employers to address any workplace policies that reflect a lack of intercultural understanding or gender bias — for the benefit of all workers.

^{7 &}quot;Demographic Overview of Aboriginal Peoples in Canada and Aboriginal Offenders in Federal Corrections — Aboriginal community development in corrections," Correctional Service Canada, retrieved from: http://www.csc-scc.gc.ca/text/prgrm/abinit/know/10-eng.shtml.

Recognition of Cultural, Historical and Geographical Distinctness: The indigenous peoples of Canada are culturally diverse and must overcome unique barriers — in part due to geography. Representatives of communities commented that too often, it is assumed that a program that has been successful in one community can be replicated in another community with the same success.

Both Inuit and Métis representatives at the AMEF voiced frustration that approaches to learner support have not yet reflected their cultures. As they pointed out — it is difficult to see yourself as a successful learner and worker, if your reality is not reflected in learning materials or among mentors in your workplace.

A representative of an Inuit organization explained the harsh realities of life in the North that create barriers to learning success. These include lack of adequate housing, poverty so severe that starvation threatens many families, geographic isolation, and population-density issues that make mainstream models of education unaffordable or unworkable. A host of other problems resulting from the assimilative policies of the past echo through subsequent generations: substance abuse, family violence, a lack of coping skills, and a sense of detachment and hopelessness.

A representative of the Métis nation noted that the Métis are almost never mentioned either in policy or education/training materials, and that many Canadians are almost totally unaware of the Métis Nation as distinct.

Delegates expressed the view that recognizing distinctions among Canada's Aboriginal populations and creating customizable, flexible solutions in direct collaboration with involved populations will have a significant impact on education-to-employment success rates.



(6) Building Community Capacity

Invest in Infrastructure, Transportation and Communication Infrastructure: Industry, Aboriginal and government representatives spoke of challenges with housing, transportation and communications infrastructure in remote Aboriginal communities. Many communities have significant problems with inadequate and overcrowded housing. Delegates stated that many Aboriginal youth find it impossible to focus on excelling at or completing education, when they do not have a dry roof to sleep under, let alone running water or indoor toilets.



Due to Canada's enormous size and harsh weather, transportation infrastructure is extremely difficult to build and maintain, which makes it very expensive to travel in northern Canada. This, in turn, makes it extremely difficult for industry, government, and communities to actively communicate. The expense and technical challenges of physical communication are exacerbated by the poor state of northern Internet and telephone access. Delegates to the AMEF widely advocated for improved transportation and communications infrastructure to improve Aboriginal access to education and employment.

A Debate on Education Funding: Aboriginal, policy, industry and educational representatives all mentioned significant funding issues. Concern was expressed about inadequate funding to Aboriginal communities, many of which are signatories to extensive treaty agreements that specifically stipulate economic benefits. Many delegates felt that federal government budget cuts were a large factor in this issue. Representatives of Aboriginal communities urged industry to lobby government for further funding, while industry delegates mentioned that they were frustrated by requests for community funding — seeing it as a federal responsibility. More discussion is required on this topic to define the various parties' responsibilities for education funding.

Building Relationships: Industry and Aboriginal representatives at the AMEF consistently stressed the importance of mining companies working to build meaningful long-term relationships with communities. Relationships, not short-term goals, must be at the core of any approach. Aboriginal community leaders and Elders concurred, saying that programs designed to increase access to education/training and to support learners (in training and as they proceed into the workplace) must not be developed with the aim of merely filling an industry skills shortage. If partnerships are to be truly effective, they must embody the indigenous value of relationship.

Delegates stated that relationships develop slowly over very long periods of time, and that industry must commit the time and resources to build those relationships to gain trust with Aboriginal communities.

Aboriginal delegates highlighted the importance of industry representatives actually going into communities, rather than merely sending information. These representatives emphasized that greater trust was to be gained by engaging communities early, so that their inputs could inform development design. Aboriginal representatives also stated that communities need to talk among themselves to gain knowledge about Aboriginal engagement throughout Canada.

Community delegates emphasized the need for industry to understand communication as a bi-lateral engagement, asserting that industry must take the time to hear the stories from communities, as well as advancing their own agenda. Industry must go in to community settings, well informed and aware of the nuanced regional differences between communities. Delegates mentioned the success of phrases such as "education is the new buffalo/salmon/cod" to communicate the role that education plays in cultivating a livelihood.

Corporate Social Responsibility: Education, government and Aboriginal representatives all noted that a significant barrier to Aboriginal people entering the mining industry is concern about environmental, social and economic impacts. Aboriginal communities often do not have the resources and expertise to assess projects, study impacts and fight the necessary legal battles to prevent adverse impacts and maximize benefits. Youth often feel that they are selling out by joining the mining industry, and they struggle to find unbiased information on the sector. Industry needs to demonstrate better corporate social and environmental responsibility, ethics and action to gain more trust from many Aboriginal peoples. Aboriginal representatives stated that Aboriginal peoples need a broader understanding of the mining process — and not just employment opportunities — to fully engage with development. They also said that before employment matters are addressed, communities need Impacts and Benefits Agreements negotiated in good faith. Many youth feel connected with the land and want to contribute to building a better world. In this vein, mining companies must also demonstrate their commitment to social and environmental responsibility by assisting with the health and development of the communities to which they are connected.



INSPIRING IDEAS AND OBSERVATIONS



Several inspiring ideas stemming from past successes and future possibilities emerged as resources that could help to improve Aboriginal mining education. These include mentorship programs, online networking and recruitment tours.

Multi-level support and engagement is fundamental to the long-term success of Aboriginal learners. Cooperation among communities, educators and industry is already being explored in many instances; this approach needs to continue to expand.

Ensuring that each learner and their family have the supports in place that will contribute to their success, along with enhanced communication among all parties will ensure the most efficient use of resources and comprehensive services for Aboriginal learners.

Mentorship. Mentorship programs have a history of success and a bright future potential. Aboriginal community members who achieve career success in any aspect of the mining industry can be brought back to communities to promote their work, to tell their stories and display their successes. They can also help teach youth and thereby, provide a tangible way for future generations to gain employment and success. Mentors show youth what they can become, and give them goals and purpose.

Online Networking. The Internet is a fantastic venue for promoting employment, creating employment and job-posting networks, and even for conducting online courses and interviews. Delegates proposed the establishment of improved and more comprehensive mining-employment information services that would help connect Aboriginal people with mining careers and diverse resources to help them qualify for work in the field.

Recruitment Tours. Mining company tours that bring Aboriginal youth to mine sites and showcase industry opportunities create tangible examples of what is possible. Further, they provide an opportunity for mining companies and communities to connect and are a great way to build relationships that can lead to future partnerships.



Community engagement and outreach. Engagement and outreach do not have to focus only on the engagement of Aboriginal learners in the mining industry. A unique concept was documented in one of the break-out discussions; in this case, outreach was aimed at promoting inter-generational learning and overall community development. By working with youth and Elders to document community history, this organization was able to provide training for young people on information documentation in a variety of media types, computer skills, presentation skills and team building, while also teaching youth about respecting others, both Elders and peers. This model showcases the use of indigenous-knowledge systems and ways of learning, and shows that building relationships between youth and Elders benefits both the individual and the community. Providing training and outreach programs that fundamentally aim to engage Aboriginal people in mining — but do so by engaging people in projects directly relevant to the specific needs of their community — is a unique and culturally considerate way to provide foundational skills for youth that can be transferred into the mining industry in the future.

Urban Aboriginal Populations. Métis and off-reserve First Nations are not often targeted for engagement within the mining sector because they do not reside in close proximity to mining operations. The growth rate in the proportion of Aboriginal people living in urban centres was identified as a key consideration for the mining industry in the coming years, as employers attempt to meet labour requirements.

Sharing Success Stories. Many educators discussed their personal experiences with successful students, highlighting the sense of accomplishment shared by the educator and learner. Seeing a learner overcome personal fears and obstacles that resulted in excitement and pride — emotions shared by the educator — demonstrates that both can benefit from a mutually enriching experience. The relationships built throughout a learner's educational journey are perhaps that journey's most instrumental and rewarding components — an important goal to consider in the development of new educational programs. Sharing these success stories and their impact not only on the learner but on those who have helped them along the way can strengthen individual learners and education programs.



Beyond Entry-level. Industry is committed to supporting Aboriginal graduation from post-secondary institutions. Furthermore, industry delegates to the AMEF expressed support for the notion of Aboriginal people acquiring Master's degrees in Science and or Engineering, and their desire to hire these graduates directly into management positions.

Early Job-centered Mentoring. This strategy begins at the elementary-school level, where students are linked with a particular professional from industry — for example, pairing a few younger students with a mechanical engineer or a millwright from their own community. The second phase of this strategy builds on the initial relationship when the students reach the secondary-school level. This concept combines employment goals, comfort and the student's ability to imagine themselves in that position in the future. This framework of mentorship has worked for other industries, for the teaching profession, the RCMP, social workers and others. Delegates recommended that mining explore what worked in these cases and adapt the model to meet the goals of Industry and communities.

The "Spirit of Exchange". This was a concept raised by industry representatives. Delegates noted that knowledge sharing is a two-way street. Industry representatives expressed frustration about wanting to engage and learn about Aboriginal communities but feeling they lacked the time to do so. This perceived lack of time creates barriers to understanding diversity, which perpetuates the homogeneity of the current workforce. Other delegates encouraged industry members to go into communities to learn about them. All parties encouraged each other to take the time for cross-cultural understanding — believing this will result in trust and relationship-building, that in turn will enhance Aboriginal engagement in mining education and employment.

THE RIPPLE EFFECT: TAKING ACTION



The goal of the Aboriginal Mining Education Forum was to not only create dialogue, but to also set in motion the actions that will lead to improved education and on to mining employment for members of Aboriginal communities. To encourage these actions, delegates were asked to complete and submit a "Ripple Effect" form, where they would commit to one post-Forum action. These actions could include anything from making a new contact to sharing the information gained at the Forum with friends and colleagues. While the Forum lasted two days, the Ripple Effect form

ensured the long-term benefits of this collaborative effort.

An analysis of the Ripple Effect forms revealed three priority areas of commitment for delegates: (1) following up with contacts or partnerships (2) creating awareness of Aboriginal education and mining challenges, and (3) pursuing new training or education programs.

The creation of new connections and partnerships was at the forefront of this event. One delegate that submitted a Ripple Effect form pledged to "contact professionals in the mining industry to discuss potential partnerships, training and education." This emphasizes the importance of the connections made during the Forum, and the actions that will be taken in the months that follow. Involving industry is an important aspect of any strategy aimed at increasing successful Aboriginal employment in mining. Industry was seen as a willing partner for both educational institutions and Aboriginal communities.



Many respondents used the Ripple Effect form to express the need to create awareness of the challenges and potential solutions discovered or reiterated at the event. Awareness was a common theme throughout the event and one respondent sought to "discuss ways to engage Aboriginal youth, so they are aware of opportunities that link back to mining careers". Partnerships among industry, education and Aboriginals can help fill current voids in career awareness.

Over the course of the event, many of the respondents discovered new training or educational opportunities for Aboriginal community members. Their goal was to learn more about these opportunities following the Forum. One respondent committed to "exploring MiHR's *Mining Essentials* program and the potential to offer it in our region." *Mining Essentials* is a pre-employment training program created by MiHR and the Assembly of First Nations (AFN) for Aboriginal peoples interested in exploring their career options in mining. The program teaches both the essential skills and work-readiness skills that the mining industry requires for entry-level positions. The value of *Mining Essentials* and similar programs in creating work-ready mining employees cannot be understated. It is an important first step in a creating employment and eventual economic stability for Aboriginal mining communities across Canada.

MiHR will follow up with delegates who submitted Ripple Effect forms, to see how their commitments have progressed over the course of the year. Delegates' commitments to continuing newly established partnerships, creating awareness of challenges in mining careers and education, and to pursuing newly discovered training programs will play an important role in the future. They will foster realistic and innovative solutions aimed at strengthening pathways from Aboriginal communities to education, to employment in the mining industry. Delegates have continued the dialogue that began with the Forum by joining the Network for Aboriginal Mining Education. Join the discussion by visiting www.aboriginalmining.ca.

RECOMMENDATIONS

The following recommendations resulting from discussions at the AMEF are applicable to a variety of audiences including, mining and mineral sector employers, educators, Aboriginal communities and/or government(s).



- (1) *Build trust through cross-cultural understanding.* When promoting careers in mining, the focus tends to be on the development of new skills and encouraging success. It is important to understand that for some Aboriginal peoples, entering a mining career may also be a cultural shock, as it can seem at odds with the core values and beliefs of some Aboriginal cultures. Although this barrier is not present for all Aboriginal people in Canada, it is recognized as a significant challenge to engaging indigenous peoples in resource development. It is important to acknowledge that for some, traditional and industrial cultures are very different, even oppositional. Understanding these differences and the fact that the two worldviews can co-exist is a first step toward reconciling these fundamental cultural divides. For example, including Aboriginal communities early enough in the planning of both employment and education, will allow communities to help shape development and ensure that they benefit from the mining process. Many Aboriginal communities are not opposed outright to development, but want a say and a stake in the extraction of their resources. Governments, companies, educational institutions, and Aboriginal communities and leaders need to open the dialogue on how to take action on these cross-cultural issues. Future forums should acknowledge this fundamental challenge and seek to initiate this conversation.
- (2) Listen and build customized solutions based on each community's needs. Communities may sometimes perceive that too many solutions are coming from outsiders, rather than from their own members. The coming together of community leaders, educators, companies and Aboriginal learners to discuss education and employment needs, community by community, can provide excellent results. For instance, this process can help companies and educators to find ways to provide culturally relevant outreach and training that will meet organizational goals, as well as address issues of importance to communities. The key is actively listening to the needs of the community, and partnerships to tear down barriers and develop customized solutions.
- (3) Develop connections early among education, industry and communities to inform and support Aboriginal learners in their pursuit of careers in mining. Educators, communities and companies should work together to first provide comprehensive information on mining and its career options, particularly those that are or will soon be available in the local community. Once an individual decides to pursue a career in mining, success can be achieved through mentorship, internships, multi-year scholarships and

- other programs that connect the learner to education and employers at an early stage. Explore initiates undertaken in other communities, companies and educational institutions, as well as in other industries, to identify solutions that can be adapted to meet the needs of specific communities and regions.
- (4) Examine and improve basic needs essential for education, such as infrastructure, transportation, communication and literacy. Housing, water and nutrition are fundamental to educational success. Without a healthy place to live and basic literacy, learners cannot be expected to excel in education. While transportation may always be challenging in Canada's remote areas, improved Internet and telecommunications networks could provide connectivity to colleges and potential employers helping to increase educational and employment opportunities for Aboriginal communities. Governments, communities, educators and companies can all play a role in building healthy communities.
- (5) Critically examine pre-requisite requirements for post-secondary programs and company recruitment policies that may be systemically creating preventable barriers for education and employment entry. For example, criminal-records checks are required by a number of companies throughout Canada. Creating procedures to assess the relevance of an applicant's criminal history to the position being sought may increase workforce engagement for Aboriginal peoples (and others). Likewise, educational institutions could consider taking prior learning assessment recognition (PLAR) and traditional/transferrable skills into consideration, when accepting students into programming, rather than basing acceptance on formal educational pre-requisites.
- (6) Provide flexible work and educational opportunities that take the family unit into consideration. It can be extremely challenging for Aboriginal learners to leave their families for extended periods of time and temporarily relocate to urban regions, due to culture shock, childcare issues, and the family unit's loss of the primary provider (especially for those living off the land). Therefore, education and training should be offered with as much flexibility as possible in the home community, with integrated experience in the workplace, and with the opportunity to earn while completing education. Aboriginal education should be augmented to include practical information on the mining cycle, Aboriginal rights, Impacts and Benefits Agreements, mining history and environmental protection. In addition, promoting more career awareness and anticipating impacts on the family unit will provide knowledge that can result in greater retention and success.



