

MINING: TOMORROW AND BEYOND

DISCUSSING THE BIGGER PICTURE

During your visit, your students were introduced to how mining has changed functionally over the course of the past 150 years. Many of these changes were driven by both learning from our mistakes as well as necessity. We are still learning, especially in the developing world where the conditions North America faced 100 years ago are being faced again. The Bigger Picture introduced your class to some of these social and political issues of modern mining.

The outcome of this exercise is to stimulate thought around current issues, how they might be dealt with, and encourage active citizenship by engaging your class in identifying the principles they believe mining companies should work by as well as what roles we all play in mining.

STEP ONE: (RE)DEFINING MINING

- 1) Ask your class “**What is mining?**”

Mining is most commonly defined as the **process** of **extracting an ore** (mineral resource) from the ground and **separating** the desired **mineral(s)** from the rock.

Make it clear mining extracts an ore from the ground, and then ask for ore to be defined.

Ore is rock which contains enough of a valuable mineral that money can be made mining it. Ore is **an economic term**.

- 2) Ask your class “**What makes a mineral valuable?**”

The answer is **demand**. Our demand for a mined material is what drives mining.

- 3) Ask your class “**Who is ultimately responsible for mining?**”

The answer is we all are.

- 4) Engage your class in the creation of a new definition of mining. This definition should account for our demand being the driving force behind it. For example, one definition that captures our role in mining is “**Mining is the difference**

between what we need and what we can recycle'. Discuss the various ways our choices drive the mining process. For example, how many get new phones every year. What happens with the old ones?

STEP TWO: DEFINING ETHICAL MINING

Now that it is clear we are all a part of mining, we need to consider what we consider good mining practices.

- 1) Ask your class if they would consider the ethical mining practices of 100 years ago to be ethical if practiced today.
For example: little safety protection, dumping waste without consideration of the impact

Clarify to your class that you are asking if the ethical practices of the past are ethical when practiced today.

- 2) Ask **'What changed? Why could something be considered ethical 100 years ago but not today?'**

The answer is ethics are socially defined – it is what we as a society say they are.

- 3) Mining companies have recognized they are part of a social enterprise, and have responded. Leading mining companies have taken the effort to define what they consider to be ethical practices. The International Council on Mining and Metals declared 10 principles on this matter in 2003. Member companies have been working towards this standard since then.

Ask **'What do you expect the mining operations of tomorrow to be like?'**

Through discussion, generate a list of principles your class believes mining companies should operate by. For example, the list might include 'prevent pollution of waterways'.

Include in this discussion the question of **'Is the western world biased towards mining?'**

It does have a bias towards mining, and that bias continues to shape mining practices globally. Discuss how this bias can impact our decisions.

Ask the question **'Is mining always the best use of the land?'**

Compare your list to the principles defined by ICMM (link below). Identify where your class and the industry agree and disagree.

<http://www.icmm.com/our-work/sustainable-development-framework/10-principles>

If needed, update your list based on the ICMM principles.

From your list of principles, create a statement of ethical mining.

We would love for you to submit back to us what your class concludes to be included in our online resources.

If you wish to delve deeper into specific issues in mining on the global front, take a look at the video resources in **Global Realities**.

STEP THREE: ACTIVELY PARTICIPATING IN MINING

- 1) Lead your students in identifying ways they can actively participate in seeing their vision of ethical mining practices become the standard for the mining of tomorrow and beyond.