



“Mining careers: short term profit versus long term gain”

RICHARD FORTUNE

Presented at New Leader’s Conference 2006, 11 – 12 April, Kalgoorlie, WA



Introduction

Salaries for mining professionals have gone up substantially in the last two years across most vocations and there has never been a better time to enter the industry, in terms of career opportunities and salary packages.

With so many offers on the table and companies outbidding each other to attract the best talent, many new professionals are being lured in by the big money, sometimes at the expense of a satisfying career and a sustainable lifestyle.

What should we consider when accepting a new position? What are our values, and how do these drive our decision making? This paper examines our core values as people and makes some observations about what it takes to really succeed in the mining industry.

The employment market

In 2004/05, commodity prices rose sharply, driven by strong demand from China. Mining companies, particularly those with iron ore and coal assets enjoyed massive surges in profits as new contracts were negotiated (see Figure 1).

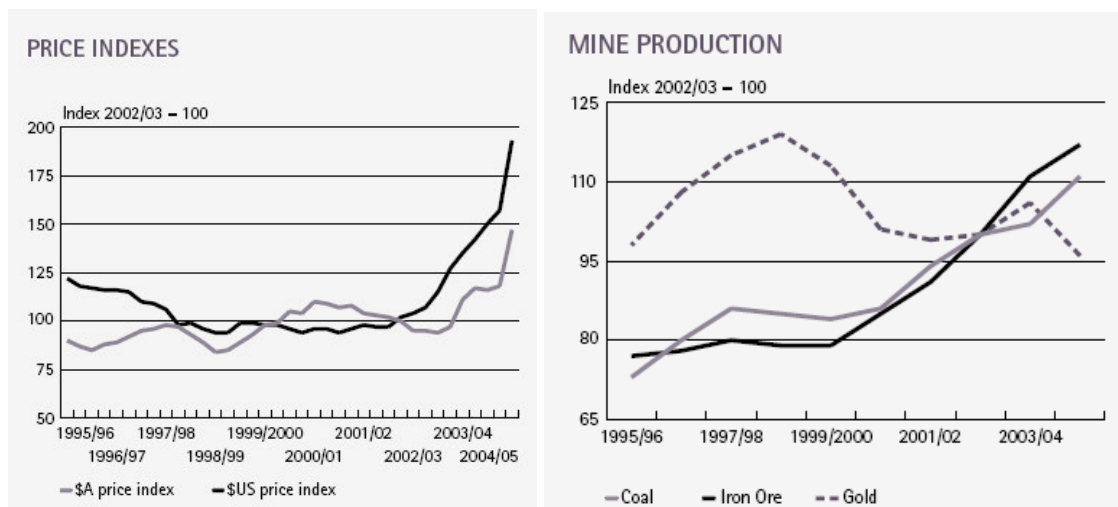


Figure 1: Mineral Commodities Price Index Figure 2: Mine Production Index

Projects and extensions to existing mines that had previously been considered uneconomic were taken off the shelf, dusted off and brought back on line. Small players began to emerge on the market seizing the opportunity to share in the profits. Mine production began to ramp up (see Figure 2) and suddenly there were employment opportunities everywhere, for everyone from labourers and tradesmen to managers and executives.

Opportunities for new professionals

The employment market is still strong. Even with a relaxation in commodity prices now underway, the momentum of the mining boom should sustain a robust employment market for years to come. One theoretical scenario is that sustained demand from developing countries such as China and India will require over 30,000 more people to enter the mining industry in the next ten years (see Figure 3). Couple this with an ageing workforce as well as people leaving the industry and the country, and this figure may be much greater.

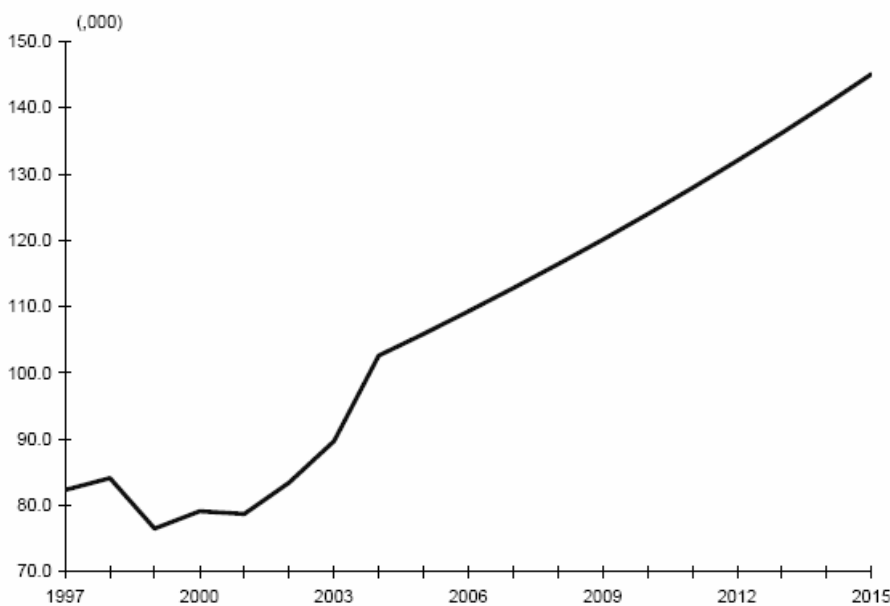


Figure 3: Estimated employed persons in the mining industry, 1997-2015 (Lowry and Lawrence, 2005)

As the market softens further, it is likely that many marginal operations owned by small companies will be bought up cheaply rather than put back on the shelf. They will probably be the target of takeovers by larger companies with lower cost structures and corporate overheads distributed over multiple operations.

For new professionals, there has never been better time to secure a future in the Australian mining industry. Enrolments have declined significantly in the last decade with more students opting to work in newer sectors such as Information Technology. In effect, there are more positions and fewer graduates entering the industry, creating a bidding war for talent.

Many of the larger companies are outbidding each other for fresh graduates, with a longer term objective of training them up. Many of the large companies have the resources to train the graduates until they become a profitable member of the business, whereas small companies tend not to have these resources available.

A good example of this salary bidding is amongst graduate mining engineers, where graduates who opt for a site based career are typically being offered starting packages of between \$70K and \$90K,



depending on the location and nature of the operation. There are a few who have started on much more than this. Compare this to five years ago when graduate mining engineer salary packages typically ranged from \$50K to \$65K with senior mining engineers more likely to negotiate around the \$70K to \$90K range.

It is not just mining engineers who are in demand: there is a shortage throughout the industry of geologists, process engineers, mechanical and electrical engineers from graduate level upwards, and salaries have gone up accordingly.

Graduates are now being given much greater responsibility and workload than they would have five years ago. For example, many graduates are now required to fill roles for senior engineers that have either left (usually poached by another company) or been given higher responsibilities. A good example of this is in underground coal mines in New South Wales. A graduate mining engineer several years ago would have helped the senior mining engineer in the strategic planning of the mine, but now many of the senior engineers have been moved into statutory management roles and only have time to address short term operational issues. Many recent graduates are now taking on strategic planning issues without a mentor and the guidance they once had.

On one hand this is a great thing: the graduate is getting excellent experience, getting better paid and is taking on more responsibility. On the other hand there are some serious side effects that will become apparent in time if not already.

The downside

One side effect of the current boom that may become an issue in the future is a lack of transfer of knowledge and resulting compromise on safety and long term profitability, as senior professionals are spending less time with the graduate. Many graduates who are given large areas of responsibility may well be doing a great job within their realm of experience, but are there issues that are being overlooked that require a more experienced eye?

The old adage 'You can't teach an old dog new tricks' certainly has a truth to it; we generally tend to establish thought processes and habits early on and are inclined to hold to these as we grow older. Are mentors teaching new professionals good habits early on or are they letting them work it out as they go along? The graduate may be 'rising the corporate ladder' at an astonishing rate and getting much experience in doing so, but what is the quality of this experience?

The new mining professional is now experiencing quite a different workplace to what they once did. A more serious side effect of the current boom and one that tends to get overlooked in our corporate culture is the effect of our work on our personal life, and the rebound effect of our personal life on work.

Increased responsibility can mean more stress, especially for an inexperienced graduate, and longer working hours. Stress, while it can make us quite productive in the short term can put strain on



relationships both at work and away from work. Longer working hours means less leisure time and can also put strain on relationships, particularly those outside of work as we spend less time with them. We can end up working so hard that we isolate ourselves from those that we need most and end up alone. There is an old biblical text that describes this situation.

*“There was a man all alone; he had neither son nor brother.
There was no end to his toil, yet his eyes were not content with his wealth.
For whom am I toiling,’ he asked, ‘and why am I depriving myself of enjoyment?’”
Ecclesiastes 4:8*

An increased salary does not necessarily equate to happiness. American circus entertainer Phineas Barnum coined the phrase ‘money is a terrible master but an excellent servant’. How many times have you heard mining people talk about the ‘golden hand-cuffs’, where they are not happy in their job but couldn’t possibly take a pay cut to leave? They have become trapped by money.

So should we be asking ourselves where our priorities are and what drives us, whether these are right motivations and what is ‘right’ anyway? Is it status, money, work satisfaction, leisure time, family or other pursuits that keeps us going? What is our purpose in life? What does it mean to be successful? Let us take a look at ourselves.

Popular views on success

Modern Western thinking goes something like this: we are on a constant course of improvement, both corporately and individually, achieving noble goals both for ourselves and for the progression of mankind. Our purpose in life seems to be defined by what we do, what we have but more significantly how we influence and how others perceive us.

Our thinking is largely shaped by Darwinian theories that have evolved over the twentieth century. Darwin’s theory of evolution by natural selection was further weaved in to social thinking by such men as English political theorist and philosopher Herbert Spencer and American historian Richard Hofstadter. They developed the concept of ‘Social Darwinism’, incorporating the idea that humans too are evolving animals in a struggle for survival; some are genetically ‘superior’ and wealthier, therefore should reproduce and pass their ‘superiority’ on to the next generation. Conversely, the poor and those with ‘inferior’ genetic makeup should be allowed to perish as a course of natural selection. If this is the case, then providing welfare for the needy would be seen as prolonging an ‘inferior’ gene pool. This belief, in its extreme form did irreparable damage across Europe at the height of Nazi Germany, but still underlies the thinking of many today, encouraging competition and individualism.

The concept of ‘survival of the fittest’ is still widely accepted and we will often refer to it subtly if not explicitly in our own thinking. How often do we smile when we read the latest ‘Darwin Award’ describing some poor individual who has written themselves off in some bizarre way? Do we feel comforted when we see millions of starving African children by justifying that nature will take its course?

A popular theory that is used to define our needs as people in terms of this 'survival' mentality, is Maslow's hierarchy of needs (see Figure 4). Maslow proposes that all our needs can be ranked in terms of importance to our existence:

1. *Physiological*: the need to eat, sleep, breath etc;
2. *Safety*: the need for shelter, employment, etc;
3. *Love/Belonging*: the need to be connected in good relationships;
4. *Esteem*: the need to be respected and have self worth; and
5. *Actualisation*: the need to make the most of one's unique abilities and to work out one's purpose in life (sometime referred to as self-transcendence).

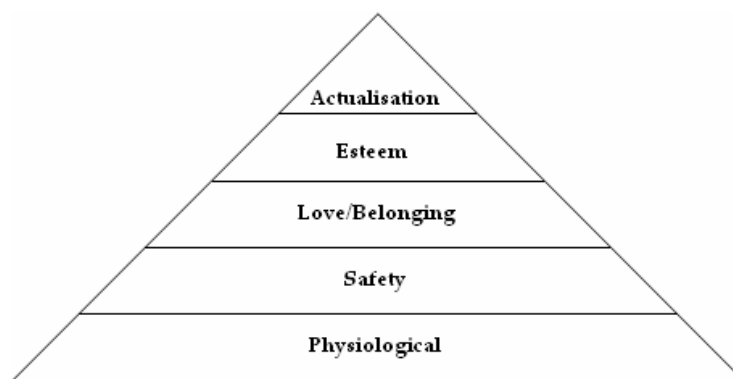


Figure 4: Maslow's Hierarchy of Needs

Essentially Maslow is saying that needs such as love/belonging, esteem and actualisation are less important than physiological and safety needs. A few high profile cases of suicide in the media lately have demonstrated that people can actually become a danger to themselves when esteem and actualisation needs are not met. It would seem that our needs can not be ranked but are all interdependent and important. (Wahba and Bridwell, 1976).

You may ask what this has to do with your life and career. The answer is everything: our thinking on these matters is crucial because it affects every aspect of our lives at work and outside it. Our thinking not only guides our behaviour as individuals but corporately, it guides policies that are the foundation of companies, institutions and governments. It therefore follows that we should examine closely the effects of our thinking and recalibrate it when we see it doing damage.

Age old wisdom

What is it that keeps us going? What is our purpose in life? In the old biblical book of Ecclesiastes, a jaded old man starts to understand the importance of good relationships after much reflection. He understands that life has no meaning without relationships.

*“Two are better than one, because they have a good return for their work:
If one falls down, his friend can help him up.
But pity the man who falls and has no one to help him up!”
Ecclesiastes 4:9-10*



The Greek philosopher Epicurus also understood this when he said “Before you eat or drink anything, consider carefully who you eat or drink with rather than what you eat or drink: for feeding without a friend is the life of a lion or wolf” (Sarder, 2006)

It would seem that we are inherently wired-up as people to relate to each other. Since the dawn of time, we have realised it is better to form alliances than to be venture out alone. Our relationships are the fundamental building blocks of society: governments emerge through relationships, companies are formed through relationships, and new life is created out of relationships.

Relationships are the source of the most joy and they are also the source of the most pain in our lives. Good relationships build civilisations and bad relationships tear them apart; peace brings prosperity and war brings destruction.

What does this mean for us? If having to relate to people is an inescapable reality, then it follows that we should above all things, work at forming and maintaining good relationships and avoid destroying relationships.

In a recent lecture in Sydney, Dr Michael Schluter, Director of Jubilee Centre in Cambridge made the observation “Most agree that personal happiness is founded on enduring human relationships. Yet today's western societies are marked by profound relationship dysfunction and decay”. He goes on to explain that we have become too transfixed with an economic bottom line at the expense of what he explains should be society's real bottom line: quality of relationships.

Dr Schluter quotes Robert Kennedy, ‘Yet if the gross national product measures all of this, there is much that it does not include. It measures neither the health of our children, the quality of their education, nor the joy of their play. It measures neither the beauty of our poetry, nor the strength of our marriages. It pays no heed to the intelligence of our public debate, or the integrity of our public official. It measures neither our wisdom nor our learning, neither our wit, nor our courage, neither our compassion nor our devotion to country. It measures everything in short, except that which makes life worth living, and it can tell us everything about our country except those things that make us proud to be a part of it.’ So it would seem that money, status and other values that are perceived to be the hallmarks of success do not measure that which really makes life worth living. Dr Schluter notes that many countries considered undeveloped because of less material wealth may be more prosperous in terms of good relationships.

What does a good relationship look like? Martin Luther King Jr once said “An individual has not started living until he can rise above the narrow confines of his individualistic concerns to the broader concerns of all humanity”. He made the observation that we are inclined to look out for ourselves before we look out for others, and this is part of our problem. To be part of the solution we need to start thinking less in terms of ‘me’ and more in terms of ‘us’. This applies to all relationships: our families, our community, and our country. It also applies to the company we work for. Perhaps we should paraphrase another well known president ‘ask not what my company can do for me, but what I can do for my company’.



Mining companies have started to realise the mutual benefits of a relational mindset in the last ten to fifteen years with the introduction of stringent environment policies that aim to maintain good working relationships in the local community. Perhaps their mantra could be “ask not what the community can do for us, but what we can do for the community”.

Even on an operational level, mining production and safety is affected by relationships. A good example is with Cornwall Coal in Tasmania, where management was able to foster good working relationships on the mining crews, noticing marked improvements in safety and production. Lost Time Injury (LTI) rates were reduced from over two hundred to zero in just seven years, by encouraging the workforce to put others before themselves (Mellows, 1999). They learnt to say “ask not what my workmates can do for me but what I can do for them”.

And perhaps when we get back home to our partners, friends and family, should we be asking ‘what can I do for them?’.

This is real success: building good relationships.

Some career profiles

Having looked at what ‘success’ really is defined by in relational terms, one may ask how this is relevant to their career.

Let us consider five theoretical candidates based off real observations, each from different backgrounds. Who is the most successful?

	Candidate A	Candidate B	Candidate C	Candidate D	Candidate E
School	Finished Yr 12 Top achiever	Finished Yr 10 Struggler	Finished Yr 12 Average	Finished Yr 12 Top achiever	Finished Yr 12 Above average
Training	Bachelor of Engineering (Hons) PhD	Apprenticeship through TAFE	Bachelor of Science (Geology) MBA	Bachelor of Engineering Stat. Quals.	Bachelor of Engineering (Hons)
First 5 years	Study	Tradesman	Exploration Geologist	Engineer	Miner
Yr 5 - 10	Engineer	Line Supervisor	Senior Geologist	Senior Engineer	Foreman
Yr 10 - 20	Senior Engineer	Plant Manager	Mining Analyst	Mine Manager	Foreman
Yr 20 – 30	Senior Engineer	General Manager	Investment Banker	School Teacher	Foreman
Yr 30 - 45	Senior Engineer	Regional Manager	CEO	School Teacher	Foreman
Comments	Very theoretical Technically brilliant Does not relate to people	Practical Excellent communicator	Theoretical Analytical Excellent communicator	Practical Driven Stressed. Difficulty communicating	Practical Easy going Good people skills

If viewed in terms of career status or money, one may well assert that Candidate C is the most successful followed by B, A, D and E. “What went wrong with E?” we think to ourselves “there was so much potential”



If viewed in relational terms with a bit more insight, we may find out that candidate E decided that family was the most important thing, and being promoted would compromise this. Candidate C on the other hand went through a marriage breakup due to work pressures, and has retired early for personal reasons. Candidate E may well be the most successful in relational terms.

One interesting and common observation is that good managers are good with people, and we see this with candidate B and C; they have most likely been promoted because they are excellent communicators. Candidate A on the other hand found people too overwhelming and preferred to do technical work. This candidate certainly plays a vital role, no greater or less than any of the others, but could he or she have developed their people skills, and have been even more useful? Likewise with candidate D, who found management all too stressful and had trouble communicating to staff. This candidate is now a school teacher and finds the classroom even worse than the mine.

Now we can see that the way we relate both at home and at work is unavoidably linked and vital to our wellbeing.

Your career

What are some of the ways that we can pursue real success then? What does a new professional in the mining industry want to achieve?

Here are some suggestions:

- A constructive personal life
- Excellence in our job.
- Contribution to our company
- Contribution to the mining industry
- Contribution to society

A constructive personal life is a most important foundation to start from. As discussed, we all need good companionship and it is essential to nurture these relationships whether they are friends, family or partners. We also need to have pursuits outside of our work where we can meet friends, for example playing on a sport team, going on fishing trips etc. It is also healthy to spend some time alone reflecting and in self-assessment (Sarder, 2006), examining our core beliefs as individuals and that which drives us. Sometimes it helps to have someone we trust give us objective feedback on how we can improve. For some this can be our parents, or for others this could be a respected friend or even a 'life coach' (Stanley, 2006)

We should want to be excellent at our job and take personal satisfaction in what we do. This involves developing good relationships at work and contributing towards a healthy work environment, as well as using our training and talent to excel at our work. We should try to understand things from our workmates perspective and as much as it is up to us, maintain a good working relationship with them. Open and honest communication with others is an excellent way of developing good relationships and



achieving 'win-win' situations. (Sommerville, 2004). One excellent way of developing through our career is to have a work mentor. A work mentor is similar to a 'life coach' but understands our work situation, and is most likely further down the track of a similar profession. This person can either be within or outside of our company, but it is important that they can give us objective and honest feedback, with our best interests at heart.

Every one has something to contribute and everyone's contribution should be respected and valued. As discussed earlier, we should think less individually and more corporately. Our contribution through work is not for ourselves but for the company and it is important to maintain this perspective. Similarly the mining company is making a broader contribution to the mining industry as a whole and to society through the provision of those materials with which we have built our world. This is not to say that there is no room for healthy competition and economic gain, but we must put our relationships with each other first. Relationships are the most valuable resource we have.

When you go for your next interview, here are some things to think about and reflect on:

- Do I understand the role well?
- Do I understand myself well and where I can contribute?
- Where do I want to be in the future at work and outside it?
- Where will this role lead to?
- Am I interested in money and benefits or the actual job itself?
- Who am I going to be working with? Can I work with them effectively? Can I learn what I need to off them?
- Do I agree with this company's vision and values?
- Is there a mentor in this organisation that I can get feedback off (if I don't have one already)?
- How are my relationships going? Will my relationships in general be enhanced or compromised through working in this role?

I wish all of you the best with your future career and I look forward to seeing you all leading the way in the mining industry of tomorrow.



References and reading

- Brereton, B, Beach, R, and Cliff, D, 2003, Workforce Turnover in FIFO Mining Operations in Australia: An Exploratory Study. Centre for Social Responsibility in Mining, University of Queensland, Australia. Available on www.csr.uq.edu.au.
- CSR, 2001, *Key findings from the AusIMM 2001 survey of mining industry professionals*. Centre for Social Responsibility in Mining, University of Queensland, Australia. Available on www.csr.uq.edu.au.
- Larkin, D, 2005, Sustainability of the minerals sector in Australia, skills needs in a global industry, *Emerging Skills Summit 2020 and Beyond: A Critical National Challenge, November 2005, Sydney*. Available on www.ausimm.com
- Larkin, D, 2002, Globalisation of the minerals industry and its impact on the sustainability of human resource capital in the minerals industry in Australia, Australasian Institute of Mining and Metallurgy. Available on www.ausimm.com
- Maslow, A H, 1943, A Theory of Human Motivation, *Psychological Review*, 50:370-396
- Mellows, B, 1997, Foundations of Safe Environment, *Tasmanian Minerals Council OH&S Seminar 1997*. Available on www.outofthepit.org
- Mellows, B, 1998, *Improving Relationships*, 1st Coal Operators Conference - Coal '98. Available on www.outofthepit.org
- Mellows, B, and Spilsbury, L, 1999, Tasmanian Minerals Council Presentation, *Tasmanian Minerals Council OH&S Seminar 1999*. Available on www.outofthepit.org
- Minerals Institute of Western Australia, 2005, People and Skills Requirements in 2015, Available on www.cmewa.com
- NCVER/NILS, 2005, Prospecting for skills: the current and future skill needs in the minerals sector. Report taken from Minerals Council of Australia www.mca.org.au
- Price Waterhouse Coopers, 2005, Minerals Industry Survey Report 2005. Available on www.mca.org.au
- Sarder, M, 2006, Work-Life Balance and Atypical Working Hours, *AusIMM Bulletin Jan/Feb 2006*, 36-38
- Schluter, M., 2005, Money, power and relationships: the spiritual renewal of public policy and private life, *Smith Lecture 2005*. Available on www.smithlecture.org
- Sommerville, K, 2004, Your Career – Are you an overnight dot.com or a long term growth option? *AusIMM New Leader's Conference 2004*. Available on www.ausimm.com.au
- Stanley, A, 2006, You need a leadership coach, *Regent Business Review*, Issue 21, 2006. Available on www.regent.edu/review
- The Holy Bible, New International Version, Ecclesiastes 4:8 and 4:9-10
- Wahba, M A, Bridwell, M G, 1976, Maslow reconsidered: A review of research on the need hierarchy theory. *Organizational behaviour and human performance*, 15:212-240.