

I have been a power station engineer since 1970. I have a degree from the University of Melbourne and an MBA. I was raised on a farm in Gippsland and I went away to boarding school when I was 11 and I have not been able to get back home until this year, when all my old friends are old or have gone away.

1. The enormous impact of the collapse of the rural economy in Australia is still washing through, and will take another generation to sort out. Many clever children have been caught up in the rural depression with its associated collapse of decent schooling and community.

2. When I did my engineering course it was third bottom in the prestige list of about 14 professions, just above social workers. It was getting back up there for a while but now all the loose talk about dirty industry has killed it again. Science is not highly regarded by the community at the moment unless it be for medicine. The idea of respect with the way in which we approach the truth is not popular.

3. Not many politicians understand engineering concepts like the laws of thermodynamics. The idea that if you throw enough money at a problem it will be solved is attractive for lazy minds.

4. There is no work for engineers in Victoria. People just want to work where they live. Clever people are the ones that find a way not to have to move to get work.

5. All my life I have had to battle against the tall poppy syndrome in the workplace. Engineers do not get treated well in the industrial environment. Basically the union movement is not helpful to them.

6. People are not cannon fodder. Engineering is the hardest course to do properly and it is not helpful for industries to be going into the high schools and deciding who is going to be any good or not. What arrogance. What an insult. It is very important at the careers nights to tell children that the world is their oyster, that they must do what turns them on, that university is an experience not to be missed. I seriously did not know what I wanted to do in life until I was in Year 3. I did engineering because it was the hardest course and I figured that if I could do that I could do anything. But ultimately, kids are not that stupid, no one ever works for anybody but themselves. You have to give them much more contact with the real engineering world before they can decide if they like it or not. Very few schoolchildren have seen inside a factory, seen the level of stuff-ups that prevails in a normal industrial environment, seen how they can make a difference, seen how badly the world wants decent leaders.

7. Seldom has the community had higher expectations of its engineers. There is a big divide in the community about energy and a double standard with regard to the environment. And a profound feeling that engineers do not have the lateral thinking skills to deliver what the community wants.

The mining companies are simply not attractive to anybody living a city like Melbourne. The image is of a military, uncivilised environment where you have to mix it with arrogant boofheads and win and who wants to do that when you are 18? All you want is time and space to think.

Looking at it another way, the very many clever people who do not get opportunities in life to get a decent education find themselves on the shop floor in a hostile environment and they

have to fight tooth and nail, do part time study in a lonely environment and work their way up through the ranks. When they get there they are the best, but few are going to make it unless there is some process for helping them.

So I think - flexible education options. Streaming for those good at maths. More exposure to industry. Company commitment to training - cadetships and a smooth transition from apprenticeship to degree, along the lines of the German model. Public image building.

I saw a sign in Melbourne the other day saying that dumb is good. It achieves more change than clever. That is the kind of attitude that prevails just now.

Thinking about continuing and mature age education, I have never had time to attend more than one or two Institution of Engineers seminars. They are usually not relevant to me, not held anywhere near where I am working. Perhaps I have a responsibility to try to foster more interest in them in my work groups, but usually my jobs have been where not many other engineers were around and people do not understand, they think they are just junkets, which they are. The same goes for continuing education seminars. I do not have time to help educate my own professional colleagues. Perhaps that is also a problem? There has always been the attitude that Involvement in professional activities is for the elderly cranks who have the time. I think support for this type of activity has to come from the management, directly off the bottom line.