

The Committee Secretary,
Senate Education, Employment and Workplace Relations Committees
PO Box 6100 Parliament House
Canberra ACT 2600

Submission for inquiry into skills shortage

I understand that the Committee is looking at the shortage of engineers and related skills.

I would like to make a few short observations on the supposed shortage of engineers and ask a few questions of the Committee.

It is my understanding that an economist would describe the supply of engineers as inelastic. That is, any increase in demand would result in a proportionally larger increase in price. This would then theoretically be followed by a slow increase in supply.

It is my observation that

- a) there has been no major increase in the salaries of senior engineers, as reported in IEAust and related surveys. Certainly they have not kept pace with CEO remuneration nor with actual areas of structural shortage (eg. electrical trades).
- b) there has not been a massive increase in people of cross training or retraining into engineering. Enrollments in Masters of Engineering are, at last reports, outnumbered even by the number of engineers entering Masters of Business Administration courses
- e) professional engineers currently spend a large proportion of their time not on technical engineering activities but rather on tasks that 20 years ago would have been carried out by the documentation, drafting, planners and administrative staff. These (lower salaried) staff have long since been shed from most organisations. This both dilutes the value of the engineering skills (that we are supposedly short of) and discourages retention within the profession.

It is true that the retention rates of engineers in the profession remains very poor. However this reported as being mostly driven by the poor remuneration for senior engineers (compared to similar professions such as law or medicine) and the lack of opportunities to practice technical engineering at a senior level (as opposed to management in an engineering business)

I put it to you that there is no shortage of engineers. There may be an inability to attract and retain engineers at the salaries businesses are willing to offer. But there is no shortage: cries that "engineers are being poached by other industries" just underlines the actual problem.

By the way, I am yet another engineer who is leaving the profession for a management role. While I lecture in engineering my advice to potential engineers remains: only join the profession if you have "a calling".

Yours
Conrad Drake

I presume that the Committee has done a survey of the literature available (including remuneration surveys) from the various professional bodies. However, some ad hoc references follow

http://www.consultaustralia.com.au/Libraries/Skills/Skills_Survey_2010.sflb.ashx

<http://memagazine.asme.org/Articles/2010/january/Satisfaction.cfm>

http://mefvic.org.au/static/files/assets/60362d8c/2002_Study_Tour_Report_-_David_Richardson.pdf

Any internet search on "retention engineering" will find similar surveys world wide