Editorial

It is often said, and has been for many years, that the majority of young engineering graduates forsake engineering practice as soon as they can in order to acquire a management label to their job title. Many universities provide courses in management of one kind or another, usually with some attractive appendage to the course title according to the latest fad. There is certainly a need to educate 'high flyers' in management and several universities have built up excellent reputations in this respect. However, does British industry need to be awash with business graduates and engineers seeking to be managers? For the sake of our future engineering industry the answer must be 'no'.

Engineering practice is all about making a contribution. The emphasis is on 'making'. To make a contribution one needs knowledge—engineering knowledge. There is no place any longer for unskilled middle management. Some engineers claim that they have 'long since lost touch with engineering practice' and that they leave 'all that' to their team. Worst of all, I have heard this said with pride, almost boastfully, by Chartered Mechanical Engineers, as if to boost their (management) status. Industry needs and deserves professional engineers who practise engineering. Great engineering leaders are engineers first and their leadership is founded on respect for their engineering expertise.

What role then is there for academic institutions and professional bodies? It is a joint task, the former to provide a solid foundation of principles and the latter to provide an environment in which engineers can develop throughout their careers. Academic institutions should prepare young engineers for the workplace by teaching good, sound principles and showing how to apply those principles in practice. There is no place for the degree course which teaches a broad awareness of engineering with nothing in depth. How can employers have confidence in the work of such graduates in professional practice? This will need to be checked, always, until the graduates migrate out of engineering. Sadly, increasingly there seems to be many courses with an awareness level of engineering.

It is vital that engineering degree courses maintain their engineering content and maintain their academic standards. Professional institutions should do likewise. Continual professional development activities (seminars, courses, etc.) should provide the stimulus to develop our engineering knowledge. They should not promote the non-technical aspects of practice excessively. Of course, management topics are required, but the correct balance needs to be found. The point to be emphasized is that it should be remembered that to be successful in engineering team members need to make an engineering contribution.

There is no place either for academic elitism. Academe and industry should keep in touch. The objective of researchers should be to advance their subject, not themselves. This journal has published many excellent papers. They have been notable because they have not only made an excellent technical contribution but have also explained their contribution without loss of content. Researchers in other fields have been able to follow the paper: its objectives, salient academic principles and discussion. Engineers in industry have, in some cases, done likewise and made favourable comments to the Editor.

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The vision of a vibrant engineering industry driven by an interest in the excellence of its engineering is one that will draw young talented people to our profession, thus ensuring the future of engineering. Industry will grow on solid foundations and provide a basis for a fair and equitable society.

Graham Thompson
Editor