



BASED ON FACT?

Re "Some observers have suggested, however, that relying on the complaints and discipline system for the profession's competence assurance is akin to after-the-fact 'competence patrol.'" ("Decision time for PEO on continuing professional development?," *Engineering Dimensions*, March/April 2010, p. 26)

I recognize the basis of this comment. I work in quality management. As such, I am also familiar with the eight essential quality management principles. The one that applies here is management by fact.

Everyone has an opinion about competence in the engineering profession. Not all of these opinions will be based on fact. The question I ponder is whether or not "some observers" had a body of facts that supported their criticism of the present system. In the absence of a factual basis, such criticisms really should fall on deaf ears.

We're either professionals or we're not. If we're not, we need to be subject to heavy legislation by a nanny state for the good of the public. If we are, I simply don't see flaws in the existing system that need to be corrected.

T.A. Hamilton, P.Eng., Edmonton, AB

CPD MODEL HAS NO VALUE

Re "Regulators weigh in on continuing competence," March/April 2010, p. 40

Increasingly, PEO reminds members of our obligations to update our skills. PEO increasingly believes engineers need a formal continuing professional development (CPD) model that reflects those used by the other professions in Canada, yet it fails to recognize important differences between engineers and those other oft-cited professions of law, architecture, physicians, accountants and nursing.

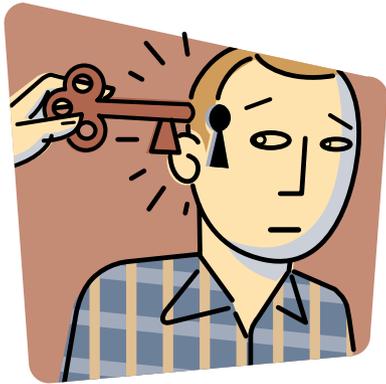
The majority of engineering graduates do not become members of PEO. Indeed, when I talk to my non-licensed colleagues they see licensing as unnecessary. Many believe PEO is only focused on the activities of engineers employed by consulting engineers, the various hydro companies, and civil and highway engineers. This should not be a surprise to anyone, since the industrial exemption is interpreted as allowing engineering graduates and technologists to design products manufactured by their employers for sale in Canada and for export. Indeed, the exemption is also interpreted as applying to many other engineering activities performed within the confines of an employer's facility. Many of these companies manufacture products for sale in other provinces and for export and, as such, they are believed to fall outside the scope of PEO. It should not be a surprise that the majority of engineering graduates, who enter the workforce and are employed by

companies that design state-of-the-art products, fail to recognize any advantage of obtaining a licence from PEO and become part of the large group of engineering graduates who never obtain a licence.

I have worked for 30 years in an international industry where I am continually required to learn new technology because of the continuing change in our customers' requirements. Development in this industry, as in many others, is through technical papers and journals, international conferences, internal training and self study. None of the proposed CPD models described in this article provide any value for me or my colleagues. Indeed, being required to write examinations, perform peer reviews or undertake compulsory training in areas dictated by PEO will be seen as an unacceptable burden, prompting many to question the value in writing the next annual membership renewal cheque. Remember, Ontario and even Canadian markets are probably too small to even support CPD courses in many subject areas.

Reading the articles and papers presented by PEO on this and other topics leads one to question if the breadth of engineering practised by PEO members and non-members alike is understood by PEO. Please do not embark upon a path that will create a PEO that exists solely for those engineers employed by hydro companies, the various levels of government, civil and highway engineering, excluding all others. It is time to fully engage all of the membership on this issue—not just the few.

Nigel N. Doran, P.Eng., Cambridge, ON



REPORTING PD

Without question, professional development is critical for all practising engineers. It would be unconscionable for an engineer to use the standards of 40 years ago simply because that is what they learned, and so far they have worked out. Seismic analysis or snow load

studies over the past 40 years have resulted in changes to the building codes and design standards; changes in steel production have improved the quality of steel; and research into all areas of applied science has resulted in improvements of which a practising engineer must be aware.

Often the changes are not significant but essential, yet over the years the incremental changes can be significant. From my experience, an engineer who used structural design standards from the 1960s, the decade he graduated, did not feel it necessary to become familiar with the latest standards—nothing I could do would convince the engineer otherwise. On the other hand, most engineers do stay on top of their field; failing to do so will lose them their jobs—consider the automotive or aerospace engineer.

So we see both ends of the spectrum: one who fails to develop and the other who continually upgrades.

The area of practice will dictate what each engineer must do for professional development. For the generalist or head of a small firm, professional development can be very broad. For a junior engineer specializing in structural or power distribution, they would need to stay on top of their specific specialties. As well, large companies must encourage their engineering staff to develop either through courses, trade shows, conferences, or volunteer work within the profession.

It seems the objection is to the reporting—see letters to the editor and articles in the last *Engineering Dimensions* (March/

April 2010). This should be the simplest part of the process. For courses or conferences, these are easily verifiable and quite often there are certificates issued. For self advancement, the supervisor can verify upgrading. Self advancement can be as simple as reading trade magazines and researching new products or technologies in a chosen field, or attending and/or participating in trade shows.

Engineering is universal. Global standards supplant national standards; national standards, provincial standards; and provincial standards, local regulations and bylaws (well, in the building industry anyway). Notwithstanding the obligation of an engineer to practise within their area of expertise, there needs to be a demonstrable level of competence. It may be as simple as writing examinations on standards to show an ongoing understanding (all CWB-certified welding engineers must periodically write examinations to show they are familiar with the latest standards), or having a supervisor approve a self-guided program.

Perhaps, more than anything else, Ontario does not have reciprocal agreements with US engineering regulators, in part because there is no requirement for professional development (there is in the US). Before Ontario considers a master's degree as the entry level for new engineers, we need to institute a professional development program.

Albert Schepers, P.Eng., Windsor, ON

Letters to the editor are welcomed, but should be kept to no more than 500 words, and are subject to editing. Publication is at the editor's discretion; unsigned letters will not be published. The ideas expressed do not necessarily reflect the opinions and policies of the association, nor does the association assume responsibility for the opinions expressed. All letters pertaining to a current PEO issue are also forwarded to the appropriate committee for information.

Address letters to jcoombes@peo.on.ca.