

PROVOCATIVE ELECTION THOUGHTS (THAT MIGHT STIMULATE AN URGE TO VOTE)

By Patrick J. Quinn, PhD (Hon.), P.Eng., FEC

THERE ARE MANY concerning issues around our engineering profession and our election process seems to reach the biggest audience for their airing. Consider: Engineers are being graduated from our universities and imported from abroad at a rate that ensures underemployment and downward pressure on engineering salaries. Beware of employer reports predicting shortages of engineers, or arguments that we have a shortage if there are more engineers per square metre in Japan.

In *PE*'s October issue, David Goldberg, a former professor of entrepreneurial engineering and president and founder of ThreeJoy Associates Inc., sees three reasons why engineering may be dying:

1. Engineering education is upside down and backward. Engineering education is a math-science death march in which mathematics and science are viewed as “the fundamentals” and design and technology are viewed as mere “applications.”
2. Engineering education is embedded in a dysfunctional culture that delights in the failure of those it educates. It is common enough to have become a cliché. An engineering professor stands at the front of a class and says, “Look to your right, look to your left. Two of the three of you won't be here next year.”
3. Engineering is perceived as a low-status profession in which engineers are socially captive to the will of non-engineers. There is a belief that engineers often work in organizations in which they have

little control over the work they do, following the orders of professional managers, who carry out goals set by corporate chieftains.

PEO, whatever its assertions as to its role as protector of the public, has steadfastly insisted on an advocacy role for the profession as a whole and, in recent years, has poured money into government liaison work fronted by overtly liberal lobbyists, which seems to often identify PEO with a liberal bias.

President Dixon's response to the collapse of a small portion of a shopping mall was to ask for government intervention, claiming that we needed a provincially appointed czar to oversee our profession—basically admitting PEO's capabilities were not up to the task. More collapses and failures of parts of buildings and infrastructure are highly probable. Many of these elements were built in a time of more limited knowledge, are past their shelf life, and their inadequate maintenance based on a lack of political and business budget priority have rendered them very fragile. Engineers who designed these elements decades ago, or who just gave recent opinions on their status, are prime scapegoat candidates. PEO recently released a practice bulletin for structural engineering assessments of existing buildings. It published a practice guideline for demolition of buildings in 2011, several years after a fatality at a demolition project.

PEO is now a \$25-million-a-year enterprise, and has a governance structure difficult to reform in a timely way through the electoral process because of its base—42 per cent of government

appointees, who have no term limits. Several have recently been appointed to third consecutive three-year terms over the wishes of elected representatives, and our act has recently been amended so that there is no automatic expiration of terms.

Still, however slow the process, elections count and have the potential to affect outcomes for the future of our profession.

Engineers must be more cognizant of reality and to the compromises necessary to progress in a fast-moving world. About six in seven members of PEO see advocating for engineers not worth a couple of hundred dollars a year, presumably because they think we are doing so well that we don't need it. And, like the proverbial frogs in the pot, they haven't noticed the temperature rising.

We must work together and drastically change direction. The answer to the question of whether we are dying as a profession (as we know it) is, undeniably, yes.

The point of this piece is that this issue of *Engineering Dimensions* offers a chance to revitalize while there is still time to influence the future—maybe even ensure the existence of our profession in the future.

I urge you to consider: Do you see a profession that is stronger today than when you joined? Are you satisfied that, as a profession, we are growing in prestige and acceptance?

I have only outlined some of the issues and suggest that you can play a role *just* by casting a vote. You can also talk to your colleagues, communicate with the candidates, send out a ripple that can grow to a wave in support of a profession that has made a great contribution to society and deserves to thrive. Please vote. Σ

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