

Editorial

The global economic problem is perhaps on the minds of people across the world, and engineering educators are no exception. This crisis will have an impact on engineering education that will persist for some time.

It is possible that more individuals might become motivated to improve their education and skills for a better future, this in turn could lead to an increased enrollment in institutions of higher education. Some may choose engineering over other less demanding disciplines, so it is important that engineering educators reach out to all prospective students.

If the cost of tuition becomes a challenge and the prospects of finding jobs in engineering declines, enrollment may suffer. Institutions need to resist the temptation of trying to improve their financial situation through substantial increases in tuition fees. It goes without saying that endowed institutions will face some financial challenges that could impact both teaching and research.

Innovation in engineering education and research will be needed more than ever before. The statement: *We haven't got the money, so we've got to think*, attributed to Ernest Rutherford, comes to mind. However, educators are the ones who should do the thinking, rather than being at the receiving end of possibly less than wise decisions. It is time for engineering educators to communicate more and to get actively involved in strategic decision making.

Another aspect of the economic situation that could be of special interest to those who are involved in engineering education is the model that led to the problem. One may wonder: is there an education bubble? Among several contributing factors to the current financial situation, the innovative model of the so-called sub-prime mortgage is pointed out as an important factor. Banks, in their enthusiasm to expand their business, lent money to those who could not afford the loans in the long-run. Could a parallel be drawn here and lessons learned? Engineering schools, in their enthusiasm to attract students, should be careful about enrolling those who cannot cope with the engineering course load and its demands in the long run. The situation will become more problematic if the study of engineering is compromised to accommodate those who are not willing to do what it takes to become an engineer. Symptoms of such a problem include the neglect of Mathematics and Physics in engineering programs, blurring the differences between sound engineering design and simply putting things together, etc. If this prevails the consequences would be more dire than those of sub-prime lending. De-valuation of engineering education and degree inflation will result. Sub-prime engineering education could lead to further serious consequences, including the loss of not only financial resources but human resources too, for which there is no compensation. Engineering educators have to be very careful how to go about attempting to persuade prospective students to pursue a career in engineering.

The current issue of the journal is a special issue on *Outreach to Prospective Engineering Students*. I would like to express my gratitude to Professor Kok Kiong Tan, Professor Lawrence J. Genalo, and Professor Igor M. Verner for the care and insight extended to review and select the papers of this special issue.

I hope that the readers will find the papers in this issue to be informative as well as thought-provoking.

Ahmad Ibrahim