

Editorial

Assessment of engineering programs, as this issue's guest editor Gloria Rogers points out has a scope so complex that there is no common agreement as to the processes that should be used. External pressures for accountability have necessitated to assess outcomes of engineering programs worldwide. The papers in this issue are overwhelmingly from US sources, where the Accreditation Board for Engineering and Technology has motivated both assessment projects and the development of assessment methodologies. But other countries are also becoming aware of the requirements of outcome assessment; in this issue there are also contributions on assessment from Australia and Cyprus. Not only engineering programs are assessed, but performance and outcome assessments are nowadays a hot issue worldwide.

The recent OECD **PISA study** has awakened some of the countries traditionally considered to have well educated populations to the fact that this may not be so. PISA is based on skills and knowledge that prepare students for life and lifelong learning, in which new knowledge and skills necessary for successful adaptation to a changing world are assessed. It aims at measuring how well students perform beyond the school curriculum, i.e. also in tertiary engineering studies. Central European countries and the USA are only in the middle field when it comes to reading literacy, mathematical literacy and scientific literacy. Notably high scores are obtained from Korea, Australia, Canada, New Zealand and Finland. That assessment outcomes are dependent on the learning cultures is evident. But, very different learning cultures can produce high outcome scores. This is exemplified by Finland, with a modern free school education system and Korea with a more traditional education system. **Daina Briedis** in her paper on developing assessment methodologies touches on the relation between culture and technological development. Are we experiencing this with the world class technology developed in Finland (Nokia) and Korea (Samsung)?

I am confident that readers of the journal will find many interesting and provoking ideas discussed in the papers in this special issue. I am most grateful to Gloria Rogers—who is a recognized authority on the subject—to have taken up the daunting task of selecting and editing the papers for this issue.

On a different subject. We have had to introduce page charges for papers accepted for publication in *IJEE*. The decision was not taken lightly. It was mandated by the paper situation. We are flooded with good paper submissions. Our selection criteria are quite strict, yet many good papers are being accepted. We have expanded the journal to double its size since 1998. We are committed to publishing all good papers, but some contribution by the authors or their institutions needs to be made in order to recover some of the costs and to continue publishing this amount of good material. We have introduced modest page charges, details of which are available on our website <http://www.ijee.dit.ie>.

Michael Wald