Editorial

Engineering education recognises the need to refocus on the applied dimension of technology in the real life scenario. This in turn requires a greater coordination and interaction among the University, Industries and most importantly the Society. The University must complement the unequivocal propriety of societal contributions in defining precise expectations for technological innovations, as the driving forces behind research and development.

At the same time, an incessant effort should be made to inculcate sensitivites among the students, to better understand modern technological challenges and the drive to accept those challenges. The existing education system must design strategies that can work as catalysts for the development of an innovative spirit and create the environment that is complementary to such endeavours. For this to happen, participatory mechanisms carved for students' involvement must be employed. For any consistent national development effort, it is essential that the students must develop a feeling to do their bit in the national development process.

In this context, it will be appropriate to quote from the report of the Council of Academies of Engineering and Technological Sciences (CAETS):

"A basic understanding of the complex world we live in is hard to imagine without mastering the technological tools around us at a minimum level. Educational systems should prepare the beneficiaries for the complexity of modern society. Many of the most important societal issues that we are facing have strong technological and scientific elements; the environment is only one of them. Still, it should be realised that much would be gained already, if technology were also seen as part of the solution, and not just as all or part of the problem. When developments such as information and communication technologies are rapidly changing not only the traditional industrial sectors, but also the service and finance sectors, technological insight will be essential to foster economic prosperity and create job opportunities. Universities should adjust to the rapid change and try to prepare for a range of future scenarios. If they do not act, they will become obsolete and be bypassed. Communication and simulating programmes should not lead to a consolidation of the past, but also assist in preparing for the future. In this respect, young people may have a keener sense of what is important for the world, than professors who claim that their under-attended courses are essential for society's prosperity. Although life-long learning will become the norm for many, choices made at a young age are often irreversible. Changes in the educational system should, therefore, take place on a broad front from primary through secondary and tertiary education. Increased re-entry of adults into an educational system should be taken into account. Re-entering is required not only to learn, but also to teach and communicate. Engineers should both enhance their abilities to listen and communicate. For many action plans to be successful, it is essential to match remedy with cause. Problems caused by economic cycles need different medicines for those caused by uninspired teaching at secondary school level, or unbalanced and outmoded university curricula. More attention is needed to couple fun and interest in life situations to science and engineering at all levels of education".

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Editor