

EDITORIAL

Much has been said, discussed and published about the quality of engineering education. Amongst other factors starting with design of curriculum, infrastructure development, one of the most important factor is the availability of quality human capital. It is not only difficult to attract quality teachers in engineering education due to several factors, but to retain them is equally difficult.

The field of engineering is subject to change, because new knowledge is created and applied. To keep abreast of such a change and maintain adequate levels of competence requires individuals to actively indulge in continuous professional development. Engineering knowledge is always growing with facts, experience and skills in science and technology. Application of knowledge is a creative process which expects to see one or more technical solutions to meet a requirement, solve a problem, and then exercise informal judgment to implement the one that best meets constraints.

Historically courses and programs concentrate on the acquisition of knowledge and theory to the detriment of performance. As a result quality has now to be recast into statements of competence relevant to the area of work. Competency can be defined as the ability derived from a base of proven knowledge and practices, to do a particular activity to a prescribed standard. It is thus concerned with what one understands and can do rather than what one knows. Competency thus is a dynamic combination of attributes, abilities and attitudes.

Engineering education must provide a thorough knowledge of the principles of engineering, based on mathematics, physics and computer science appropriate to ones discipline.

In the above context faculty training and development are important processes required in modern teaching and learning environment. Career development is an important aspect which can be linked with reward and reinforcement for motivation, increasing industry interaction and pursuing research and development activities. Faculty also should be motivated to improve their career by participation in seminars, workshops, conferences for presenting papers, in national as well as international events. Enhancement in qualification by pursuing doctoral degrees would be very beneficial. Participation in summer vacation courses would help in keeping abreast with new knowledge. Several institutions offer such courses in different fields on a regular basis. Affiliation to professional bodies and participation in their activities would also enable faculty to remain up-to-date.

Continuous professional development is a process by which engineers maintain their professional competence and awareness of current developments in engineering and particularly in their chosen specialization acquired in variety of ways e.g. in-house training, open learning, short courses, conferences, seminars, workshops, self study, preparing and making presentations and being a coach or mentor.

Engineering Education Foundation, is not only taking a lead in organizing training programs for engineering teachers but a financial support is also provided as the foundation has an opinion that such a training is utmost important. The trained teachers would be trainers of future.

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