

Editorial**Importance of Active Learning**

The meaning of word learning goes back to the concept of finding out, discovering. Hence, the origin of learning is rooted in activity, doing something in order to find out about the world. Active learning and engineering education constitute a natural pair. An engineer is trained to design and construct solutions to problems in the real world. Originally teaching in engineering used to have close ties to engineering practice, and only gradually did engineering education become more and more theoretical based. However, in recent years, this trend has reversed. Several authors claim active learning methods like problem – based learning and project – organized learning as natural methods for engineering education, because these methods fit in so nicely with engineering practice.

Evidently the discussion in engineering education does not stop at the contents of curriculum. The goal is not to fill our students' heads full of knowledge, but to provide a well adapted learning environment, which allow them to “learn to learn”, and enables them to acquire the combination of knowledge, skills and attitudes needed to obtain professional engineering competencies. Activating students is both an effective approach in didactic sense as well as fitting preparation for practice.

Today, most engineering institutes work with one or another variety of active learning. Consequently there are many examples of good practice. However, the choice of methods is often determined largely by incidental factors. What is missing is an overview of the effectiveness of different types of methodologies to achieve specific educational goals. What is needed is systematic approach detailing the educational benefits in relation to specific characteristics of active learning methods.