

# Editorial

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This issue's special section is on Pre-college engineering education which in the USA is known as K-12 education—Kindergarten to 12th class. Most countries have 12 schooling classes up to matriculation prior to tertiary level education. Varied activities are initiated by university academics including summer camps, studies in museums, and special curricula for schools. These activities are well established in the USA where it is no exception when faculty get involved in skills and knowledge transfer activities for pre college teenagers. Outside the USA such activities are more common among faculty involved in teacher and school education. The unique involvement in the USA in furthering such school activities by academic faculty members may be related to the situation of teacher education. On the European continent technical teacher education is well developed in separate pedagogical institutions. Kocijancic and Haberman contributing in this issue are involved in teacher and school education whereas the papers by Wankat, and Welch are by regular engineering and education faculty. K-12 activities are intensively covered by the American Society of Engineering Education (see their website). Every year at the ASEE annual conference there are sessions and poster stands covering such activities.

The issue has been guest edited by Lawrence Genalo, Steve Watkins and Hans-Peter Christensen following the proposal by Genalo. It is the first of two issues on this theme. An excellent collection of papers has been selected and I am most indebted to the guest editors who did all the work of selecting, reviewing and editing the papers. In passing- I must admit that I was initially somewhat hesitant in agreeing to publish papers outside our mainstream line of contributions. But, on second thoughts, the problem of motivating and recruiting new students for engineering-an increasingly difficult task-should be part and parcel of our duties as engineering academics.

The topic of engineering education research keeps nagging me. There is no question that working on research to improve assessment, retention, teaching, project management and teaching efficiency are all fine. However, we have a large body of papers which deal with the more intimate development of laboratories and theory for engineering courses. These latter activities are overwhelmingly conducted by regular engineering faculty whose knowledge of education fundamentals is usually modest at best. We support such publications, as case studies for faculty who would want to develop similar activities. I am not convinced that this type of information is much in demand, although much of this work requires a considerable time investment and should be useful for those who embark on setting up new courses and laboratories. I suspect though, that much of the teaching is home brewed without reference to what others are doing, with the exception of consulting available textbooks. Initially, when launching the journal we also aimed at a readership in developing countries wanting to set up new engineering courses and curricula. This goal seems to me now to have been utopic. The overwhelming part of our readers and contributors comes from the most well established engineering schools. A good lot from the top 100 ranking technical universities in the world. I will try to come up with an explanation for this in due course.

Michael Wald