

# Editorial

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The current issue publishes the remaining 13 papers on trends in electronics education guest edited by Ahmad Ibrahim and Aleksander Malinowski. The first part of the special issue was published in Volume 20 number 1.

The papers are divided into papers on innovative laboratory schemes and methods, and papers on applications of new media and communication facilities to learning, testing and assessing student progress. A march of time through the development of multimedia in asynchronous student learning is exemplified by the first paper by Szabados who presents a current picture of how far multimedia instructional aids have come. We are moving forward from the flip chart type presentation, true/false, multiple choice and calculation raster to deeper learning systems. Newer features are intelligent calculations with feedback that check the methods as well as the format of the answers, graphical interactive designs with step by step checks on the student responses. An expert system guides students in formulating answers in correct language and grammar, and provides hints with gradually increasing focus guiding towards correct answers.

It is gratifying to observe that senior research faculty such as Professor Szabados feel that the development of advanced learning platforms for engineers is a worthy area of research development for educational purposes. We are still at the beginning of the personalized instruction era. It is apparent that the student of the future will have much more freedom of choice acquiring knowledge and applying it, using technology, mentoring and virtual teams. It is the greatest leap in learning concepts and technologies since Gutenberg invented printing.

In taking a tally of the positions of contributors to this issue, which probably reflects the distribution of the ranks of authors for the journal, we find the following. The papers in this issue were contributed by 12 Full Professors, 11 Associate Professors, 6 Assistant Professors, 5 lecturers, 5 higher degree candidates and 4 researchers and engineers. It is encouraging to realize that senior members of faculty are interested and working on development of the educational environment of students. These staff members are often heavily involved in research and supervision of advanced degree students, yet they see the need to devote time to the educational aspects of their work. It is also clear that the aspiring junior members of the faculty are involved in improving the educational offerings of their institutions. Moreover, publication in a refereed and recognized journal helps to get them job promotion.

I am very grateful to the dedicated work by the guest editors Ahmad and Aleksander. Their success in selecting 24 papers out of many more submissions on trends in electronics education, emphasises that electronics has remained the prime candidate for research in educational methods as well as research per se in engineering science.

Michael Wald