Editorial

Charalampos Karagiannidis and Sabine Graf, Co-Editors

Welcome to the Bulletin of the IEEE Technical Committee on Learning Technology, Volume 15, Number 3, July 2013 issue. This issue focuses on topics related to the **school of the future and future classrooms** and consists of six articles discussing cutting-edge research on this topic.

In the first article, Lai, Chen and Chen investigate the use of dynamic quick response (QR) codes. An evaluation with four school classes and four teachers reveal clear benefits of using dynamic QR codes in the classroom in terms of making learning and teaching easier and saving time.

The second article, written by Gigliotti, Carrington and Agostinho, introduces a study on the potential of 1:1 laptop programs to support higher order thinking in primary schools. The results include two important findings, namely that laptops can facilitate higher order thinking when learners are encouraged to take an active part in learning, and that the role of teachers is key to such successful learning.

In the next article, Mosharraf, Taghiyareh, and Pezhman Nasirifard present a new learning management system that is designed for students in elementary schools. As such, the system includes some features that are especially important for younger students, including features to increase students' motivation and reduce competitive pressure in assessments.

In the fourth article, Lembo, Mecella, and Vacca look into the drastic chnages that schools currently go through related to the use of new technologies and introduce a project that aims at creating a design methodology for 21st century schools. Furthermore, they investigate and define tools that would be in such new classrooms, including currently existing tools and new ones.

Subsequently, Bautista and Borges address the topic of smart classrooms. The authors discuss the concept of smart classrooms and propose nine principles that are essential for smart classrooms.

The last article in this special issue is written by Cárdenas-Robledo and Peña-Ayala and deals with intelligent and adaptive learning systems and proposed an ubiquitous student model which includes a variety of student characteristics to be considered for personalization of learning experiences.

We sincerely hope that the issue will help in keeping you abreast of the current research and developments in Learning Technology. We also would like to take the opportunity to invite you to contribute your own work in this Bulletin, if you are involved in research and/or implementation of any aspect of advanced learning technology. For more details, please refer to the author guidelines at http://www.ieeetclt.org/content/authors-guidelines.

Special theme of the next issue: *E-Learning in the Workplace*
Deadline for submission of articles: *Sept. 25, 2013*

Articles that are not in the area of the special theme are most welcome as well and will be published in the regular article section.