

## Editorial Preface

# Special Issue on Interaction Design in Educational Environments: Studying Technology in the Classroom, Part 1

Habib M. Fardoun, Information Systems Department, King Abdulaziz University (KAU), Jeddah, Saudi Arabia

Jose A. Gallud, University of Castilla-La Mancha (UCLM), Albacete, Spain

Hachem Awada, Educational Technology Department, Lebanese University (LU), Beirut, Lebanon

This Special Issue includes extended versions of some of the papers presented in the 4th Workshop on Interaction Design in Educational Environments, which was held in Albacete. Educational environments have been improving while new technologies have arrived to the market.

Novel technologies and applications provide educators with new methodologies and tools that allow them to introduce effectively new educative activities in the classroom. Therefore, improving the user interaction is one of the aspects that can increase the student's performance inside of the learning process.

The next paragraphs outline the articles included in this special issue, which has a special focus on studying how technology has been applied in educational environments.

The article "Designing stories for educational video games: Analysis and evaluation", by López-Arcos et al, analyze the effectiveness of the story in a video game using a method that includes user-centered techniques. The authors have applied that method to the design of an educational video game in the field of mathematics and an adventure game for training the reading skills.

Adolfina Pérez and Victoria Marín present an article called "Enhancement Process of Didactic Strategies in a Degree Course for Pre-service Teachers", which presents a study on the enhancement of didactic strategies based on the idea of personal learning environments (PLE).

A code of good teaching practice based on quality and innovation concepts that can be applied in Higher Education is the work presented by Francisco Ibañez et al in the article "Incorporating a Quality and Innovation Culture in Daily Teaching".

Habib M. Fardoun and Hachem Awada propose the introduction at the classes of a system whose target is to facilitate teacher's labour in the common tasks that are done over the class session. The proposal is included in the article "Mobile Technology to Support the Interactive Classroom".

The next article is "Learning in cross-media environment", by Stefano Bonometti. The author identifies the factors that contribute to overcoming the 'real' vs. 'online' and 'theory' vs. "practice" gap, opting for an integrated cross-media learning environment.

Stamatios Papadakis et al study the appropriateness of Scratch and App Inventor as educational environments for teaching introductory programming in Primary and Secondary education. In this article, the authors focus on the use of App Inventor and Scratch as blocks-based programming environments designed explicitly with novices in mind.

The last paper, by Mathias Fund and Migchiel van Diggelen, present a new feedback tool based on a study of a university database. The presented research work focuses on the translation of related work in the area of feedback mechanisms for higher education into a tailored framework for feedback in the area of Industrial Design, the translation of the existing corpus of data into indicators of feedback quality and how feedback is received and further on used by students in their learning process.

All the articles in this Special Issue present a step forward in the application of novel technologies and tools in educational environments. Both authors and editors hope the different contributions presented in this Special Issue can be useful in the improvement of the user interaction in educational environments.

*Habib M. Fardoun*  
*Guest Editor*  
*IJWLTT*