GUEST EDITORIAL PREFACE

Learning by Design: Purpose, Art & Motion

Akila Sarirete, CISCO, Effat University, Jeddah, Saudi Arabia
Rania Ibrahim, Student Affairs, Effat University, Jeddah, Saudi Arabia

Effective teaching is a work of art. Teachers often think of themselves as performers, and of giving a lecture as a performance. In the past, these performances were often monologues delivered to a captive audience. Today however, most educators understand that they can be more effective when the learner takes an active role in the process, and in fact becomes part of the show. The “teaching performance” today also no longer needs to be a one-man show. Using technology, and with purposeful thought, today’s educators can draw on an almost unlimited pool of resources to design and construct learning experiences that are engaging, relevant, and most of all, successful. These successful experiences are also expected to develop future learners as proactive human beings that help in the positive social motion of their communities.

Selected papers from the L&T 2011 conference are presented in this issue. The conference explored several ideas that relate to designing learning experiences that use the digital resources available today in interesting and educationally effective ways to create motion at different levels. Our goal is to help educators find, select, and integrate these resources with one another in order to create a meaningful learning environment. We would also like to observe and understand how this new learning environment creates motion in society. The key threads are the following:

- **Purpose:** Educators today recognize that a purposeful design can significantly improve the quality of learning. Accreditation standards worldwide are increasingly focused on learning outcomes, which must be clearly expressed and successfully achieved. How can the technology of social media, mobile gadgets, etc. enrich the purposeful design of learning? What are the key processes and guiding principles? What innovative and engaging resources are available today?

- **Art:** One of the biggest uses of computers, especially among the youth, is as a tool for creating art. It is important for educators to recognize this and use it to improve the
learning process. In order to do so, we first need to better understand the relationship between art and learning. How do the processes of design and creation relate to effective teaching? How can we use the arts – visual arts, performing arts, applied arts, writing, etc. – to produce engaging learning experiences?

• **Motion:** Computers are no longer static pieces of plastic and metal that sit on a desk, and which humans interact with only through a keyboard or a mouse. As motion becomes more and more integrated in the digital world, how will this impact the use of technology in education? How does motion relate to social connection? And after motion, what comes next?

The Learning and Technology conference aims to provide a forum for sharing knowledge, experience and creative ideas among researchers, academicians, professors, educational scientists and technologists, industry and companies in all areas of education and technology.

We would like to thank the steering committee, Dr. Haifa Jamal Al-lail, Dr. Houria Oudghiri, Dr. Saddiga Al Ghalib, Dr. Annette Lagman, Dr. Azza Abou Zeid, Dr. Grete Pasch, the Project Manager, Dr. Malak Al-nory, the Program Chair, Dr. Akila Sarirete and the program committee members, Dr. Nighet Mir, Dr. Imtiaz Ahmed, Dr. Houria Oudghiri, Dr. Annette Lagman, Dr. Malak Al-nory and Ms. Hanan Ahmed. A special acknowledgement goes to the several organizing committees chairs and their members (Mr. Khaled El Abassy, Ms. Mai, Ms. Maram Al Balbisi, Ms. Bouthaina Hamadi, Ms. Faten Al Alfy, Ms. Moodi Al Saib, Ms. Noor Balfagih, Ms Maram Ziyada, Ms. Areej Al-Shareef, Dr. Kholod Ashgar, Ms. Iman Al Moaraoue, Dr. Zainab Abuelmaati, Ms. Suzan Mohamed, Ms. Rasha Zahrawi, Ms Eman Swaid and their committee members) for their valuable time in organizing the conference and providing guidance and making the event a success.

A special thank you goes as well to the several reviewers from Effat University, IEEE members and other universities such as UQU (Um AlQura University), KAU (King Abdul Aziz University), KSU (King Saud University).

The papers chosen in this journal reflect the theme of the conference in promoting a vision of purposefully designed education broadened by art, motion, and technology. Learning has moved beyond the walls of the physical classroom.

The first paper, *Technology Intervention for the Preservation of Intangible Cultural Heritage (ICH)* by Muqeem Khan and Penny de Byl, presents the initial outcomes of a key scoping study undertaken to explore the role of augmented reality and motion detecting technologies in the context of Intangible Cultural Heritage (ICH) for museums related environments. Initial prototypes are in the form of an interactive infrared camera based application for children to engage with an Aboriginal puppet. This scoping study is unique, as it tries to combine two extremes: the curation of historical intangible artifacts and their preservation through digital intervention.

The second paper, *Information Security Perspective of a Learning Management System: An Exploratory Study* by Mohd Faiz Hilmi, Shahrier Pawanchik, Yanti Mustapha, and Hafizi Muhamad Ali discusses the information security aspect of Learning Management Systems (LMS). This study provides a review of information security in e-learning environments and explains the important of information security. The second purpose of this study is to understand student perception of an information security perspective of an e-learning management system.

The third paper, *LearnOnline: Personal Learning Environment Implementation in University of South Australia* by Muzammil M. Baig, talks about Personal Learning Environments (PLEs) in University of South Australia. The university initiated a three year new learning platform project in 2010, called LearnOnline,
which will replace the University’s current online teaching environment UniSAnet. The paper explains the features of LearnOnline and evaluate its design methodologies.

The fourth paper, *Web Based Service for Collaborative Authoring Learning using Grid Portal*, by Dayang Hjh. Tiawa Hamid, Norma Alias, Abdul Hafidz Hj. Omar, Md. Rajibul Islam, Hafizah Farhah Saipan, Siti Qatrunada Muhd Palil, Asnida Che Abdul Ghani, Nurelya Ramli, introduces a web based service for collaborative authoring learning to create, share and explore dynamic contents since many problems occurred while using the current e-learning software such as Moodle and LAMS. This paper proposes the alternative e-learning software technology based on grid portal.

The fifth paper, *Use of Portable Devices to Teach English Language* by Khalid Thabit, and Fouad Dehlawi, addresses the use of Portable MP3/MP4 players as an aiding tool in the educational environment, and hypothesis that these devices would help improve learning, e.g. fluency in English. The authors report on a number of preliminary studies which suggest that the use of such devices helped students in English learning.

The sixth paper, *Strategies for Effective Use of Technology in Face-to-Face and Hybrid University Level Courses to Improve Student Learning* by Balkeseese V. KunhiMohamed, discusses the definitions of face-to-face learning, hybrid learning, and related terms concerning the continuum of technology-based learning methods as proposed by Bates (2001) and Bates and Poole (2003); (2) introduce effective uses of technology in face-to-face and hybrid university level courses; and (3) discuss justifications based in research literature for the use of technology to enhance student learning. The main focus of this paper is to introduce strategies for effective use of technology in both face-to-face and hybrid-style university level courses. This paper is intended for higher-education instructors in both face-to-face and hybrid-style instructional contexts.

Potential E-training packages develop Webquests Designing Skills for Teachers of Gifted Students? by Hanan Ahmed Abdulhaimeed, studies the effectiveness of using an E-training package to develop Webquest designing skills for teachers of gifted students. The main research question was how well gifted students’ teachers acquire the Webquest’s designing skills after studying the proposed E-training package?

Paper eight, *Argumentation-based Learning for Communities of Practice* by Nikos Karacapilidis, Manolis Tzagarakis, and Nikos Karousos, presents CoPe_it!, an innovative web-based tool that supports collaboration and augments learning through argumentative discourses. The tool provides the means to manage individual and collective knowledge by adopting an incremental formalization approach. The paper demonstrates the tool’s applicability to Communities of Practice and discusses the potential of the approach in the context of e-Learning.

The last paper, *Exploring the meaning of Mobile Learning for Informal Learning: Preliminary and exploratory Study* by Young Park and Yong-Ju Jung, defines mobile technology as a contemporary learning tool and environment that can make a difference in users’ informal learning practice. Mobile technology is becoming a device that many people carry every day and its possibility to facilitate learning seems to be highly promising. With such societal and cultural movement in mind, to understand the nature of mobile users’ experiences and their meanings in terms of learning, the study investigates (a) users’ actual experiences in using mobile, (b) users’ perceptions toward the effectiveness and meaning of mobile for learning, and (c) the characteristics of informal learning appeared through mobile learning.