

**Call for Papers**  
**Special Issue on**  
***Intelligent and Affective Learning Environments: New***  
***Trends and Challenges***  
**in**  
**Journal of Educational Technology & Society**  
(5-Year impact factor 1,34 according to Thomson Scientific 2013 Journal Citations  
Report)

**Special issue publication date: April 2016**

**Objective**

Technology is playing an increasingly crucial role in the delivery of education, which in turn is driving research into finding ever better technological solutions. Traditional Intelligent Tutoring Systems (ITS) are able to support and control student's learning on several levels but doesn't provide space for student-driven learning and knowledge acquisition. From this perspective, Intelligent Learning Environments and similar tutoring systems have emerged as a kind of intelligent educational system which combines the features of traditional ITS and learning environments. This kind of educational system can be very helpful in supporting human learning by using Artificial Intelligent (AI) techniques, transforming information into knowledge, using it for tailoring many aspects of the educational process to the particular needs of each actor, and timely providing useful suggestions and recommendations. Intelligent Learning Environments have been successfully used and applied in different fields of knowledge like medicine, Electronic, Computer Programming, military training to mention but a few.

In recent years, ITS have incorporated the ability to recognize the student's affective state, in addition to traditional cognitive state identification. These tutoring systems can detect affect and engagement by using different types of data sources like dialogs, speech, physiology, and facial expressions. Moreover, these tutoring systems seek to change in students, negative emotional states (e.g. confused) into positive states (e.g. committed) in order to facilitate an appropriate emotional state for learning. Affective Tutoring Systems identify confusion, frustration, boredom, engagement, and other emotions prominent during learning activities. Students' affect recognition can be implemented by different machine learning techniques like Bayesian Networks,

Hidden-Markov Models, or Neural Networks. Although many works and studies have considered the development of affective tutoring systems, there is no research works yet especially in Intelligent and Affective Learning Environments, where all the involved components of the environment (the learning environment, the intelligent tutoring system, and/or the adaptive system) support the learning process. Taking this into account, there is a need to propose new approaches, techniques, methods, and processes in the field of Intelligent and Affective Learning Environments, with the purpose of considering cognitive and affective aspects in the teaching-learning and decision-taking processes.

The aim of this special issue is to collect innovative theoretical work and original applications on the field of Intelligent and Affective Learning Environments that recognize and respond to student emotions combining software and hardware methods. This special issue wants to focus on original scientific contributions in the form of theoretical, experimental research and case studies applying new perspectives on affect and learning or theories that integrate cognition with affect during learning. We also want to bring research on novel technologies that monitor emotions.

### **Topics of interests include, but are not limited to:**

- Modeling, Enactment and Intelligent Use of Emotion and Affect
- Affect Detection ,Response, and Generation on learning
- Affect Models and Theory
- Affective Computing in Education
- Affective Tutoring Systems
- Affective learning Companions (Emotive Agents)
- Student and Domain Models with Affect
- Sentiment Analysis on Education Applications
- Software Architectures for Affective Learning Systems
- Intelligent Learning Management Systems
- Affect in Game-Based Learning Environments
- Mobile and Emotional Learning Applications
- Affect Methodologies
- Affect-Aware Learning Technologies
- Authoring tools and Affect
- Interaction Based-Affect Detection in Educational Software

### **Submission Guidelines and Other considerations**

This special issue will only publish regular research papers (up to 7000 words). Papers submitted must not have been published previously or under consideration for publication, though they may represent significant extensions of prior work. All submitted papers will go through a rigorous double-blind peer-review process (with at least three reviewers). The acceptance process will focus on those papers that address original scientific contributions in the form of theoretical and experimental research and case studies applying new perspectives on Intelligent and Affective Learning Environments.

An abstract submission is mandatory to allow editors a better assignment of reviewers. For this reason, authors which intent to submit a paper to this special issue should send an email with title and abstract to the Lead Guest Editor.

Before submission authors should carefully read over the journal's Author Guidelines, which are located at <http://www.ifets.info/guide.php>. Prospective authors should submit an electronic copy of their complete manuscript using EasyChair system at: <https://easychair.org/conferences/?conf=etsiale2016>.

### **Timeline**

Abstract submission: April 6, 2015

Manuscript submission deadline: May 15, 2015 (\*NEW Extended Deadline\*)

First Review to be completed (includes author notification): July 10, 2015

Deadline for receipt of revisions: August 15, 2015

Second review to be completed (includes author notification): September 20, 2015

Final version: October 10, 2015

Publication: April, 2016

### **Lead Guest Editor**

**Ramón Zatarain Cabada Ph.D.**, Division of Research and Postgraduate Studies, Instituto Tecnológico de Culiacán, Juan de Dios Bátiz, 310 Pte. CP 80220, Culiacán, Sinaloa, México. Email: [rzatarain@itculiacan.edu.mx](mailto:rzatarain@itculiacan.edu.mx)

### **Guest Editors**

**Giner Alor Hernández Ph.D.**, Division of Research and Postgraduate Studies, Instituto Tecnológico de Orizaba, Oriente 9 #82 Emiliano Zapata, CP. 94320, Orizaba, Veracruz, México. Email: [galor@itorizaba.edu.mx](mailto:galor@itorizaba.edu.mx)

**María Lucía Barrón Estrada Ph.D.**, Division of Research and Postgraduate Studies, Instituto Tecnológico de Culiacán, Juan de Dios Bátiz, 310 Pte. CP 80220, Culiacán, Sinaloa, México. Email: [lbarron@itculiacan.edu.mx](mailto:lbarron@itculiacan.edu.mx)

**Ricardo Colomo-Palacios Ph.D.**, Full Professor at the Computer Science Department of the Østfold University College, Norway. Email: [ricardo.colomo-palacios@hiof.no](mailto:ricardo.colomo-palacios@hiof.no)

**Hao-Chiang Koong Lin Ph.D.**, Dean, College of Innovative and Management, National Taipei University of Business, Dept. of Information and Learning Technologies, National University of Tainan. Email: [koonglin@gmail.com](mailto:koonglin@gmail.com)