

## **1. Special Issue Title**

### **Multimedia Technology Enhanced Learning and Education**

## **2. Guest editors, titles, affiliations, and primary contact email**

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## **3. Abstract and justification**

The advent of new technologies such as the Multimedia and Internet of Things has brought opportunities for Technology Enhanced Learning. The technologies with Multimedia can be applied the intelligence functions to learning which range from Smart School, Smart Class to Smart Learning at Home and so on. Accordingly, the assessment and evaluation methods need to be developed and involved into the iterative designing process. This new notion involves some tasks in which traditions are replaced by multimedia technology requiring manual discrimination and resolution to reach the optimization. In addition, with the development of Internet of Things, Technology Enhanced Learning application pays greater attention to the interconnection between multi-modal interactive technologies and information systems to the maximum extent possible. Based these new technologies, the increasing networking in different scales from global to local is having a profound effect on learning and teaching. It makes new forms of collaborative and personalized learning experiences reality. Then it can be seen that further efficient management and deeper analysis of Technology Enhanced Learning are the key tasks in developing smart school or individual learning application at home based on Multimedia technologies.

This special issue calls for high quality, up-to-date technology related to Multimedia in Technology Enhanced Learning and serves as a forum for researchers all over the world to discuss their works and recent advances in this field. In particular, the special issue is going to showcase the most recent achievements and developments in multimodal interactive technologies for Technology Enhanced Learning. Both theoretical studies and state-of-the-art practical applications are welcome for submission. All submitted papers will be peer-reviewed and selected on the basis of both their quality and their relevance to the theme of this special issue.

## **4. Topics on interest**

The list of possible topics includes, but not limited to:

- Multimedia in Technology Enhanced Learning
- Intelligent User Interface for Learning
- Pattern Recognition and Computer Vision for Learning
- Virtual Reality/ Augmented Reality and HCI in Education
- Social computing/social media and Context-aware systems
- Semantic Web and Mobile technologies for Learning
- Sensors and Sensor Networks for Enhancing Learning
- Roomware, ambient displays and wearable devices
- eLearning specifications and standards
- Learning analytics
- Computer-supported collaborative learning
- Teaching techniques and strategies for online learning
- Learner motivation and engagement
- Evaluation methods for Technology Enhanced Learning
- Cognitive mechanisms in knowledge acquisition and construction
- Self-regulated and self-directed learning
- Global learning communities
- Lifelong learning
- Massive Open Online Courses (MOOC)
- Open educational resources (OER)
- Accessible learning for all
- Visual, hearing and physical impairments
- Cloud Computing Platform Based BigData Mining
- Multimedia Communications, Visual Signal Processing and 3D video pre/post-processing
- Wireless and Internet-of-Things Technology for Learning
- Serious Game for Education
- Pervasive Wireless Communication for Virtual School
- Human Element of Learning System Design

## **5. Proposed dates**

Submission Deadline: February 29, 2015.

First Revision: March 30, 2016.

Subsequent Revision: April 30, 2016.

Final decision: May 30, 2016

Final Manuscript: June 30, 2016