

INTED **2016**

10th International
Technology, Education and
Development Conference

7-9 March, 2016
Valencia (Spain)

CONFERENCE PROCEEDINGS



10 years together for **education.**

INTED **2016**

**10th International
Technology, Education and
Development Conference**

7-9 March, 2016
Valencia (Spain)

**CONFERENCE
PROCEEDINGS**

Published by
IATED Academy
iated.org

INTED2016 Proceedings
10th International Technology, Education and Development Conference
March 7th-9th, 2016 — Valencia, Spain

Edited by
L. Gómez Chova, A. López Martínez, I. Candel Torres
IATED Academy

ISBN: 978-84-608-5617-7
ISSN: 2340-1079
Depósito Legal: V-337-2016

Book cover designed by
J.L. Bernat

All rights reserved. Copyright © 2016, IATED

The papers published in these proceedings reflect the views only of the authors. The publisher cannot be held responsible for the validity or use of the information therein contained.

WELCOME INTRODUCTION

Dear INTED2016 participants,

Welcome to this 10th anniversary of INTED!

We wish to express our most sincere thanks for being part of this inspiring forum of knowledge exchange. It is a pleasure to present a varied program with a wide range of sessions covering all aspects of learning, teaching and educational technology advances.

After 10 years, this edition has brought together nearly 700 delegates coming from more than 80 countries. This will create a truly international and multidisciplinary atmosphere that will promote the interaction with other colleagues with the same aim: to meet, learn and share ideas for a better education.

We hope that your participation in this conference will provide you with an opportunity to open your minds to other educational perspectives and explore new horizons.

Thank you very much for your contribution to these *"10 Years together for Education"*.

INTED2016 Organising Committee

INTED2016 COMMITTEE AND ADVISORY BOARD

Aaron Doering	UNITED STATES	Ignacio Candel	SPAIN	Natalie Wilmot	UNITED KINGDOM
Agustín López	SPAIN	Inmaculada Tomás	SPAIN	Norhayati Ismail	SINGAPORE
Alfredo Soeiro	PORTUGAL	Iolie Nicolaidou	CYPRUS	Norma Barrachina	SPAIN
Allen Grant	UNITED STATES	Iván Martínez	SPAIN	Olaf Herden	GERMANY
Alma B. Rivera-Aguilera	MEXICO	Ivan Traina	ITALY	Olga Teruel	SPAIN
Alvaro Torres	GUATEMALA	Javier Domenech	SPAIN	Omar Majid	MALAYSIA
Amparo Girós	SPAIN	Javier Martí	SPAIN	Ozden Sahin Izmirli	TURKEY
Ana Paula Lopes	PORTUGAL	Jayant Ghiara	UNITED STATES	Paul Rea	UNITED KINGDOM
Ana Tomás	SPAIN	Jelena Gledic	SERBIA	Paulo Cunha	PORTUGAL
Andrew Youde	UNITED KINGDOM	Jesudasan Fredrick Thomas	OMAN	Peter Haber	AUSTRIA
Angela Addison	UNITED KINGDOM	Jill Clark	NEW ZEALAND	Philippou Pouyioutas	CYPRUS
Annalene van Staden	SOUTH AFRICA	Joanna Lees	FRANCE	Regis Kawecki	FRANCE
Antonio García	SPAIN	Jose F. Cabeza	SPAIN	Robert Pucher	AUSTRIA
Beyza Yilmaz	TURKEY	Jose Luis Bernat	SPAIN	Rodolfo Matos	PORTUGAL
Brigita Janiunaite	LITHUANIA	Ju Youn Song	LUXEMBOURG	Roger Hill	UNITED STATES
Bruno Guimarães	PORTUGAL	Kai Zhang	PORTUGAL	Roman Dorczak	POLAND
Canan Karababa	TURKEY	Kartikay Saini	INDIA	Rosellen Rosich	UNITED STATES
Chelo González	SPAIN	Kem Rogers	CANADA	Rosslyn Albon	UAE
Ciaran Dawson	IRELAND	Ketevan Kupatadze	UNITED STATES	Ryuichi Matsuba	JAPAN
Claudia Dörfer	MEXICO	Kiruthika Ragupathi	SINGAPORE	Sam Kerr	SOUTH AFRICA
Cristina Lozano	SPAIN	Krista Lussier	CANADA	Samaneh Tarighat	IRAN
Dalia Hanna	CANADA	Leonard Wallezky	CZECH REPUBLIC	Sergio Pérez	SPAIN
David Martí	SPAIN	Lorena López	SPAIN	Shakila Yacob	MALAYSIA
Dee O'Connor	AUSTRALIA	Louise Emanuel	UNITED KINGDOM	Simon Hayhoe	UNITED KINGDOM
Delyan Genkov	BULGARIA	Luis Gómez Chova	SPAIN	Slavi Stoyanov	NETHERLANDS
Dušan Barać	SERBIA	M ^a Jesús Suesta	SPAIN	Souad Demigha	FRANCE
Eladio Duque	SPAIN	Manishkumar Varma	INDIA	Sudha Goyal	INDIA
Ellen Whitford	UNITED STATES	M ^a Lurdes Correia Martins	PORTUGAL	Talat Allahyari	IRAN
Eva-Catherine Hillemann	AUSTRIA	Maria Manuela Varela	PORTUGAL	Thelma de Jager	SOUTH AFRICA
Evi Papaioannou	GREECE	Maria Porcel	SPAIN	Thor O. Olsen	NORWAY
Filomena Soares	PORTUGAL	Maria Renata Duran	BRAZIL	Tom Warms	UNITED STATES
Fouad Chaatit	MOROCCO	Maria Teresa Gastardo	GREECE	Vassilis Bokolas	GREECE
Gilda Rosa Bolaños	MEXICO	Marielle Patronis	UAE	Victor Fester	NEW ZEALAND
Gilles Sagodira	RÉUNION	Mary Kirwan	IRELAND	Vladimír Bradáč	CZECH REPUBLIC
Harm Tillema	NETHERLANDS	Michael Cameron	NEW ZEALAND	Wycliffe Nyaribo	KENYA
Haydar Oztas	TURKEY	Miika Kuusisto	FINLAND	Xavier Lefranc	FRANCE
Hulya Gorur-Atabas	TURKEY	Mohamed Alseddiqi	BAHRAIN	Yun Fat Lam	HONG KONG
Hussein Assalahi	UNITED KINGDOM	Mónica Fernández	SPAIN	Yurgos Politis	IRELAND
Ignacio Ballester	SPAIN	Nadia Volchansky	UNITED STATES	Zafer Kurtaslan	TURKEY

CONFERENCE SESSIONS

ORAL SESSIONS, 7th March 2016

Collaborative Learning
Massive Open Online Courses (MOOC)
Pedagogical & Didactical Innovations (1)
Meet the Keynote
Tutoring and Coaching
Entrepreneurship Education (1)
Management and Development in Education
Experiences in Foreign Languages Education

Problem-based and Inquiry-based Learning
Virtual and Augmented Reality
Pedagogical & Didactical Innovations (2)
Learning spaces and Next Generation Classrooms
Pedagogical Innovations in Primary and Secondary Education
Entrepreneurship Education (2)
Leadership and Management in Education
Language Learning Experiences

Flipped Learning
Open Educational Resources
Pedagogical & Didactical Innovations (3)
Creative and Innovative Projects in Education and Technology
ICT Innovations in Primary and Secondary Education
Professional Development of Teachers
Educational Experiences in Health & Life Sciences
Mobile Learning in Foreign Languages

Mobile Learning
Social Media in Education
Technology Enhanced Learning
Virtual Worlds & Robotics for Inclusive Learning
Inclusive Learning
ICT Skills and Competencies among Teachers
ICT in Health & Life Sciences
Technology in Foreign Language Education

POSTER SESSIONS, 7th March 2016

Experiences in Education

Research in Education

ORAL SESSIONS, 8th March 2016

Blended Learning
 Collaborative Virtual Environments
 Multicultural and Diversity Issues
 Special Education
 Experiences in STEM
 Digital Competencies & Digital Literacy
 ICT Experiences in Maths Education
 New Projects and Innovations in Primary and Secondary Education (1)

e-Learning (1)
 Educational Software and Apps
 International Experiences and Mobility Programmes
 Supporting the Undergraduate Experience for Students on the Autism Spectrum
 Enhancing Learning and the Undergraduate Experience
 Who's the best for the job?
 Experiences in Business Education
 New Projects and Innovations in Primary and Secondary Education (2)

e-Learning (2)
 E-content Management and Development
 Evaluation and Assessment of Student Learning
 Critical Perspectives on 21st Century Education
 Links between Education and Research
 Competence Evaluation
 Experiences in Curriculum Design in Engineering Education
 Technology in Primary and Secondary Education

Research Experiences in Online Education
 Learning Analytics & Big Data
 ICT Innovations in Higher Education
 Quality Assurance in Education (1)
 Adult & Life-Long Learning
 Labour Market and Skill Needs
 Experiences in Engineering Education
 Teacher Training and Development

Research on Technology in Education
 Educational Software & Student Response Systems
 University-Industry Collaboration
 Quality Assurance in Education (2)
 Postgraduate and Research Experiences
 Work Employability
 Experiences in Architecture and Civil Engineering
 Pre-service Teacher Experiences

POSTER SESSIONS, 8th March 2016

Emerging Technologies in Education
 New Trends and Pedagogical Innovations

VIRTUAL SESSIONS

Barriers to Learning
Collaborative and Problem-based Learning
Competence Evaluation
Computer Supported Collaborative Work
Curriculum Design and Innovation
E-content Management and Development
e-Learning
Education and Globalization
Education in a multicultural society
Educational Research Experiences
Educational Software and Serious Games
Enhancing learning and the undergraduate experience
Ethical issues in Education
Evaluation and Assessment of Student Learning
Experiences in STEM Education
Impact of Education on Development
Inclusive Learning
International Projects
Learning and Teaching Methodologies
Learning Experiences in Primary and Secondary School
Lifelong Learning
Links between Education and Research
Mobile learning
New projects and innovations
New Trends in the Higher Education Area
Organizational, legal and financial issues
Pedagogical & Didactical Innovations
Pre-service teacher experiences
Quality assurance in Education
Research Methodologies
Research on Technology in Education
Student Support in Education
Technological Issues in Education
Technology-Enhanced Learning
Transferring disciplines
University-Industry Collaboration
Virtual Universities
Vocational Training