

Turkish Online Journal of Educational Technology

Special Issue 2 for INTE 2015

July, 2015

Prof. Dr. Aytekin İşman
Editor-in-Chief

Prof. Dr. Jerry WILLIS - ST John Fisher University in Rochester, USA
Prof. Dr. J. Ana Donaldson - AECT President
Editors

Assist.Prof.Dr. Fahme DABAJ - Eastern Mediterranean University, TRNC
Associate Editor

Assoc.Prof.Dr. Eric Zhi - Feng Liu - National Central University, Taiwan
Assistant Editor





**THE
TURKISH ONLINE
JOURNAL
OF
EDUCATIONAL
TECHNOLOGY**

July, 2015
Special Issue 2 for INTE 2015

Prof. Dr. Aytekin İşman
Editor-in-Chief

Editors
Prof. Dr. Jerry Willis
Prof. Dr. J. Ana Donaldson

Associate Editor
Assist. Prof. Dr. Fahme Dabaj

Assistant Editor
Assoc. Prof. Dr. Eric Zhi - Feng Liu

ISSN: 2146 - 7242

Indexed by
Education Resources Information Center – **ERIC**
SCOPUS - ELSEVIER

!

!

Copyright © THE TURKISH ONLINE JOURNAL OF EDUCATIONAL TECHNOLOGY

All rights reserved. No part of TOJET's articles may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

Published in TURKEY

Contact Address:
Prof. Dr. Aytekin İŞMAN
TOJET, Editor in Chief
Sakarya-Turkey

Message from the Editor-in-Chief

Dear Colleagues,

We are very pleased to publish Special Issue 1 for INTE 2015 conference. This issue covers the papers presented at 6th International New Horizons in Education Conference which was held in Barcelona, Spain. These papers are about different research scopes and approaches of new developments and innovation in educational.

Call for Papers

TOJET invites you article contributions. Submitted articles should be about all aspects of educational technology. The articles should be original, unpublished, and not in consideration for publication elsewhere at the time of submission to TOJET. Manuscripts must be submitted in English.

TOJET is guided by its editors, guest editors and advisory boards. If you are interested in contributing to TOJET as an author, guest editor or reviewer, please send your CV to tojet.editor@gmail.com.

July 2015

Prof. Dr. Aytekin ISMAN

Sakarya University

Editorial Board

Editors

Prof. Dr. Aytekin İŞMAN - Sakarya University, Turkey
Prof. Dr. Jerry WILLIS - ST John Fisher University in Rochester, USA
Prof. Dr. J. Ana Donaldson – AECT, Past President

Associate Editor

Assist.Prof.Dr. Fahme DABAJ - Eastern Mediterranean University, TRNC

Assistant Editor

Assoc.Prof.Dr. Eric Zhi - Feng Liu - National Central University, Taiwan

Editorial Board

Prof.Dr. Ahmet Zeki Saka - Karadeniz Technical University, Turkey
Prof.Dr. Akif Ergin - Başkent University, Turkey
Prof.Dr. Ali Al Mazari - Alfaisal University, Kingdom of Saudi Arabia
Prof.Dr. Ali Ekrem Özkul - Anadolu University, Turkey
Prof.Dr. Antoinette J. Muntjewerff - University of Amsterdam
Prof.Dr. Arif Altun - Hacettepe University, Turkey
Prof.Dr. Arvind Singhal - University of Texas, USA
Prof.Dr. Asaf Varol - Fırat University, Turkey
Prof.Dr. Aytekin İşman - Sakarya University, Turkey
Prof.Dr. Brent G. Wilson - University of Colorado at Denver, USA
Prof.Dr. Buket Akkoyunlu - Hacettepe University, Turkey
Prof.Dr. Cengiz Hakan Aydın - Anadolu University, Turkey
Prof.Dr. Chang-Shing Lee - National University of Tainan, Taiwan
Prof.Dr. Charlotte N. (Lani) Gunawardena - University of New Mexico, USA
Prof.Dr. Chi - Jui Lien - National Taipei University of Education, Taiwan
Prof.Dr. Chih - Kai Chang - National University of Taiwan, Taiwan
Prof.Dr. Chin-Min Hsiung - National pingtung university, Taiwan
Prof.Dr. Colin Latchem - Open Learning Consultant, Australia
Prof.Dr. Colleen Sexton - Governor State University, USA
Prof.Dr. Demetrios G. Sampson - University of Piraeus, Greece
Prof.Dr. Dimiter G. Velez - University of National and World Economy, Bulgaria
Prof.Dr. Don M. Flournoy - Ohio University, USA
Prof.Dr. Dongsik Kim - Hanyang University, South Korea
Prof.Dr. Enver Tahir Rıza - Dokuz Eylül University, Turkey
Prof.Dr. Eralp Altun - Ege University, Turkey
Prof.Dr. Feng-chiao Chung - National pingtung university, Taiwan
Prof.Dr. Ferhan Odabaşı - Anadolu University, Turkey
Prof.Dr. Finland Cheng - National pingtung university, Taiwan
Prof.Dr. Fong Soon Fook - Uniiversiti Sains Malaysia, Malaysia
Prof.Dr. Francine Shuchat Shaw - New York University, USA
Prof.Dr. Gianni Viardo Vercelli - University of Genova, Italy
Prof.Dr. Gwo - Dong Chen - National Central University Chung - Li, Taiwan
Prof.Dr. Hafize Keser - Ankara University, Turkey
Prof.Dr. Halil İbrahim Yalın - Gazi University, Turkey
Prof.Dr. Heli Ruokamo - University of Lapland, Finland
Prof.Dr. Henry H.H. Chen - National pingtung university, Taiwan
Prof.Dr. Ing. Giovanni Adorni - University of Genova, Italy
Prof.Dr. J. Ana Donaldson - AECT President
Prof.Dr. J. Michael Spector - University of North Texas, USA
Prof.Dr. Jerry Willis - ST John Fisher University in Rochester, USA
Prof.Dr. Jie-Chi Yang - National central university, Taiwan
Prof.Dr. Kinshuk - Athabasca University, Canada
Prof.Dr. Kiyoshi Nakabayashi - Chiba Institute of Technology, Japan
Prof.Dr. Kumiko Aoki - The Open University of Japan, Japan
Prof.Dr. Kuo - En Chang - National Taiwan Normal University, Taiwan
Prof.Dr. Kuo - Hung Tseng - Meiho Institute of Technology, Taiwan

Prof.Dr. Kuo - Robert Lai - Yuan - Ze University, Taiwan
Prof.Dr. Liu Meifeng - Beijing Normal University, China
Prof.Dr. Marina Stock Mcisaac - Arizona State University, USA
Prof.Dr. Mehmet Ali Dikermen - Middlesex University, UK
Prof.Dr. Mehmet Çağlar - Near East University, TRNC
Prof.Dr. Mehmet Gürol - Fırat University, Turkey
Prof.Dr. Mehmet Kesim - Anadolu University, Turkey
Prof.Dr. Mei-Mei Chang - National pingtung university, Taiwan
Prof.Dr. Melissa Hui-Mei Fan - National central university, Taiwan
Prof.Dr. Min Jou - National Taiwan Normal University, Taiwan
Prof.Dr. Ming - Puu Chen - National Taiwan Normal University, Taiwan
Prof.Dr. Murat Barkan - Yaşar University, Turkey
Prof.Dr. Mustafa Murat Inceoğlu - Ege University, Turkey
Prof.Dr. Mustafa Şahin Dündar - Sakarya University, Turkey
Prof.Dr. Nabi Bux Jumani - International Islamic University, Pakistan
Prof.Dr. Nian - Shing Chen - National Sun Yat - Sen University, Taiwan
Prof.Dr. Paul Gibbs - Middlesex University, UK
Prof.Dr. Petek Aşkar - Hacettepe University, Turkey
Prof.Dr. Ramdane Younsi - Ecole polytechnique de Montreal, Canada
Prof.Dr. Rauf Yıldız - Çanakkale 19 Mart University, Turkey
Prof.Dr. Roger Hartley - University of Leeds, UK
Prof.Dr. Rozhan Hj. Mohammed Idrus - Universiti Sains Malaysia, Malaysia
Prof.Dr. Saedah Siraj - University of Malaya, Malaysia
Prof.Dr. Sello Mokoena - University of South Africa, South Africa
Prof.Dr. Servet Bayram - Yeditepe University, Turkey
Prof.Dr. Shan - Ju Lin - National Taiwan University, Taiwan
Prof.Dr. Sheng Quan Yu - Beijing Normal University, China
Prof.Dr. Shi-Jer Lou - National pingtung university, Taiwan
Prof.Dr. Shu - Sheng Liaw - China Medical University, Taiwan
Prof.Dr. Shu-Hsuan Chang - National Changhua University of Education, Taiwan
Prof.Dr. Stefan Aufenanger - University of Mainz, Germany
Prof.Dr. Stephen Harmon - Georgia State University, USA
Prof.Dr. Stephen J.H. Yang - National Central University, Taiwan
Prof.Dr. Sun Fuwan - China Open University, China
Prof.Dr. Sunny S.J. Lin - National Chiao Tung University, Taiwan
Prof.Dr. Teressa Franklin - Ohio University, USA
Prof.Dr. Toshio Okamoto - University of Electro - Communications, Japan
Prof.Dr. Toshiyuki Yamamoto - Japan
Prof.Dr. Tzu - Chien Liu - National Central University, Taiwan
Prof.Dr. Uğur Demiray - Anadolu University, Turkey
Prof.Dr. Ülkü Köymen - Lefke European University, TRNC
Prof.Dr. Vaseudev D.Kulkarni - Hutatma Rajjguru College, Rajguruunagar(Pune),(M.S.) INDIA
Prof.Dr. Xibin Han - Tsinghua University, China
Prof.Dr. Yau Hon Keung - City University of Hong Kong, Hong Kong
Prof.Dr. Yavuz Akpınar - Boğaziçi University, Turkey
Prof.Dr. Yen-Hsyang Chu - National central university, Taiwan
Prof.Dr. Yuan - Chen Liu - National Taipei University of Education, Taiwan
Prof.Dr. Yuan-Kuang Guu - National pingtung university, Taiwan
Prof.Dr. Young-Kyung Min - University of Washington, USA

Assoc.Prof.Dr. Abdullah Kuzu - Anadolu University, Turkey
Assoc.Prof.Dr. Adile Aşkım Kurt - Anadolu University, Turkey
Assoc.Prof.Dr. Ahmet Eskicumalı – Sakarya University
Assoc.Prof.Dr. Aijaz Ahmed Gujjar - Sindh Madressatul Islam University, Pakistan
Assoc.Prof.Dr. Aytaç Göğüş - Sabancı University, Turkey
Assoc.Prof.Dr. Chen - Chung Liu - National Central University, Taiwan
Assoc.Prof.Dr. Cheng - Huang Yen - National Open University, Taiwan
Assoc.Prof.Dr. Ching - fan Chen - Tamkang University, Taiwan
Assoc.Prof.Dr. Ching Hui Alice Chen - Ming Chuan University, Taiwan
Assoc.Prof.Dr. Chiung - sui Chang - Tamkang University, Taiwan

- Assoc.Prof.Dr. Danguole Rutkauskiene - Kauno Technology University, Lietvenia
Assoc.Prof.Dr. David Tawei Ku - Tamkang University, Taiwan
Assoc.Prof.Dr. Eric Meng - National pingtung university, Taiwan
Assoc.Prof.Dr. Eric Zhi Feng Liu - National central university, Taiwan
Assoc.Prof.Dr. Erkan Tekinarslan - Bolu Abant İzzet Baysal University, Turkey
Assoc.Prof.Dr. Ezendu Ariwa - London Metropolitan University, U.K.
Assoc.Prof.Dr. Fahad N. AlFahad - King Saud University
Assoc.Prof.Dr. Fahriye Altınay - Near East University, TRNC
Assoc.Prof.Dr. Gurnam Kaur Sidhu - Universiti Teknologi MARA, Malaysia
Assoc.Prof.Dr. Hao - Chiang Lin - National University of Tainan, Taiwan
Assoc.Prof.Dr. Hasan Çalışkan - Anadolu University, Turkey
Assoc.Prof.Dr. Hasan KARAL - Karadeniz Technical University, Turkey
Assoc.Prof.Dr. Hsin - Chih Lin - National University of Tainan, Taiwan
Assoc.Prof.Dr. Huey - Ching Jih - National Hsinchu University of Education, Taiwan
Assoc.Prof.Dr. Huichen Zhao - School of Education, Henan University, China
Assoc.Prof.Dr. Hüseyin Yaratın - Eastern Mediterranean University, TRNC
Assoc.Prof.Dr. I - Wen Huang - National University of Tainan, Taiwan
Assoc.Prof.Dr. I Tsun Chiang - National Changhua University of Education, Taiwan
Assoc.Prof.Dr. Ian Sanders - University of the Witwatersrand, Johannesburg
Assoc.Prof.Dr. İsmail İpek - Fatih University, Turkey
Assoc.Prof.Dr. Işıl Kabakçı - Anadolu University, Turkey
Assoc.Prof.Dr. Jie - Chi Yang - National Central University, Taiwan
Assoc.Prof.Dr. John I-Tsun Chiang - National Changhua University of Education, Taiwan
Assoc.Prof.Dr. Ju - Ling Shih - National University of Tainan, Taiwan
Assoc.Prof.Dr. Koong Lin - National University of Tainan, Taiwan
Assoc.Prof.Dr. Kuo - Chang Ting - Ming - HSIN University of Science and Technology, Taiwan
Assoc.Prof.Dr. Kuo - Liang Ou - National Hsinchu University of Education, Taiwan
Assoc.Prof.Dr. Larysa M. Mytsyk - Gogol State University, Ukraine
Assoc.Prof.Dr. Li - An Ho - Tamkang University, Taiwan
Assoc.Prof.Dr. Li Yawan - China Open University, China
Assoc.Prof.Dr. Manoj Kumar Saxena - Central University of Himachal Pradesh, Dharamshala, Kangra, India
Assoc.Prof.Dr. Mike Joy - University of Warwick, UK
Assoc.Prof.Dr. Ming-Charng Jeng - National pingtung university, Taiwan
Assoc.Prof.Dr. Murat Ataizi - Anadolu University, Turkey
Assoc.Prof.Dr. Nergüz Serin - Cyprus International University, TRNC
Assoc.Prof.Dr. Norazah Mohd Suki - Universiti Malaysia Sabah, Malaysia
Assoc.Prof.Dr. Normaliza Abd Rahim - Universiti Putra Malaysia, Malaysia
Assoc.Prof.Dr. Oğuz Serin - Cyprus International University, TRNC
Assoc.Prof.Dr. Ping - Kuen Chen - National Defense University, Taiwan
Assoc.Prof.Dr. Popat S. Tambade - Prof. Ramkrishna More College, India
Assoc.Prof.Dr. Prakash Khanale - Dnyanopasak College, INDIA
Assoc.Prof.Dr. Pramela Krish - Universiti Kebangsaan Malaysia, Malaysia
Assoc.Prof.Dr. Tzu - Hua Wang - National Hsinchu University of Education, Taiwan
Assoc.Prof.Dr. Vincent Ru-Chu Shih - National Pingtung University of Science and Technology, Taiwan
Assoc.Prof.Dr. Wu - Yui Hwang - National Central University, Taiwan
Assoc.Prof.Dr. Ya-Ling Wu - National pingtung university, Taiwan
Assoc.Prof.Dr. Yahya O Mohamed Elhadj - AL Imam Muhammad Ibn Saud University, Saudi Arabia
Assoc.Prof.Dr. Yavuz Akbulut - Anadolu University
Assoc.Prof.Dr. Zehra Altınay - Near East University, TRNC
Assoc.Prof.Dr. Zhi - Feng Liu - National Central University, Taiwan
- Assist.Prof.Dr. Aaron L. Davenport - Grand View College, USA
Assist.Prof.Dr. Andreja Istenic Starcic - University of Primorska, Slovenija
Assist.Prof.Dr. Anita G. Welch - North Dakota State University, USA
Assist.Prof.Dr. Betül Özkan - University of Arizona, USA
Assist.Prof.Dr. Burçin Kısa Işık - Gaziantep University, Turkey
Assist.Prof.Dr. Chiu - Pin Lin - National Hsinchu University of Education, Taiwan
Assist.Prof.Dr. Chun - Ping Wu - Tamkang University, Taiwan
Assist.Prof.Dr. Chun - Yi Shen - Tamkang University, Taiwan
Assist.Prof.Dr. Chung-Yuan Hsu - National pingtung university, Taiwan

Assist.Prof.Dr. Dale Havill - Dhofar University, Sultanate of Oman
Assist.Prof.Dr. Ferman Konukman - College of Arts and Science, Sport Science Program, Qatar University
Assist.Prof.Dr. Filiz Varol - Firat University, Turkey
Assist.Prof.Dr. Guan - Ze Liao - National Hsinchu University of Education, Taiwan
Assist.Prof.Dr. Hsiang chin - hsiao - Shih - Chien University, Taiwan
Assist.Prof.Dr. Huei - Tse Hou - National Taiwan University of Science and Technology, Taiwan
Assist.Prof.Dr. Hüseyin Ünlü - Aksaray University, Turkey
Assist.Prof.Dr. Jagannath. K Dange - Kuvempu University, India
Assist.Prof.Dr. K. B. Praveena - University of Mysore, India
Assist.Prof.Dr. Kanvaria Vinod Kumar - University of Delhi, India
Assist.Prof.Dr. Marko Radovan - University of Ljubljana, Slovenia
Assist.Prof.Dr. Min-Hsien Lee - National central university, Taiwan
Assist.Prof.Dr. Mohammad Akram Mohammad Al-Zu'bi - Jordan Al Balqa Applied University, Jordan
Assist.Prof.Dr. Muhammet Demirbilek - Süleyman Demirel University, Turkey
Assist.Prof.Dr. Pamela Ewell - Central College of IOWA, USA
Assist.Prof.Dr. Pei-Hsuan Hsieh - National Cheng Kung University, Taiwan
Assist.Prof.Dr. Pey-Yan Liou - National central university, Taiwan
Assist.Prof.Dr. Phaik Kin, Cheah - Universiti Tunku Abdul Rahman, Kampar, Perak
Assist.Prof.Dr. Ping - Yeh Tsai - Tamkang University, Taiwan
Assist.Prof.Dr. S. Arulchelvan - Anna University, India
Assist.Prof.Dr. Seçil Kaya - Anadolu University, Turkey
Assist.Prof.Dr. Selma Koç Vonderwell - Cleveland State University, Cleveland
Assist.Prof.Dr. Sunil Kumar - National Institute of Technology, India
Assist.Prof.Dr. Tsung - Yen Chuang - National University of Taiwan, Taiwan
Assist.Prof.Dr. Vahid Motamedi - Tarbiat Moallem University, Iran
Assist.Prof.Dr. Yalın Kılıç Türel - Firat University, Turkey
Assist.Prof.Dr. Yu - Ju Lan - National Taipei University of Education, Taiwan
Assist.Prof.Dr. Zehra Alakoç Burma - Mersin University, Turkey
Assist.Prof.Dr. Zerrin Ayvaz Reis - İstanbul University, Turkey
Assist.Prof.Dr. Zülfü Genç - Firat University, Turkey

Dr. Arnaud P. Prevot - Forest Ridge School of the Sacred Heart, USA
Dr. Balakrishnan Muniandy - Universiti Sains Malaysia, Malaysia
Dr. Brendan Tangney - Trinity College, Ireland
Dr. Chen Haishan - China Open University, China
Dr. Chin Hai Leng - University of Malaya, Malaysia
Dr. Chin Yeh Wang - National Central University, Taiwan
Dr. Chun Hsiang Chen - National Central University, Taiwan
Dr. Chun Hung Lin - National central university, Taiwan
Dr. Farrah Dina Yusop - University of Malaya, Malaysia
Dr. Hj. Issham Ismail - Universiti Sains Malaysia, Malaysia
Dr. Hj. Mohd Arif Hj. Ismail - National University of Malaysia, Malaysia
Dr. I-Hen Tsai - National University of Tainan, Taiwan
Dr. Jarkko Suhonen - University of Eastern Finland, Finland
Dr. Li Ying - China Open University, China
Dr. Norlidah Alias - University of Malaya, Malaysia
Dr. Rosnaini Mahmud - Universiti Putra Malaysia, Malaysia
Dr. Sachin Sharma - Faridabad Institute of Technology, Faridabad
Dr. Seetharam Chittoor Jhansi - Pushpa Navnit Shah Centre for Lifelong Learning, India
Dr. Tam Shu Sim - University of Malaya, Malaysia
Dr. Tiong Goh - Victoria University of Wellington, New Zealand
Dr. Vikrant Mishra - Shivalik College of Education, India
Dr. Zahra Naimie - University of Malaya, Malaysia