

Editors:

Prof. Ali Kallel, Dean of the Faculty of Sciences, Sfax University, TUNISIA

Prof. Abdelhamid Hassairi, Sfax University, TUNISIA

Prof. Cornelia Aida Bulucea, University of Craiova, ROMANIA

Prof. Nikos Mastorakis, Technical University of Sofia, BULGARIA

Advanced Educational Technologies

6th WSEAS/IASME International Conference on Educational Technologies (EDUTE '10)

Sponsor and Organizer: University of Sfax, Faculty of Sciences of Sfax



Kantaoui, Sousse, Tunisia, May 3-6, 2010

Recent Advances in Computer Engineering A Series of Reference Books and Textbooks

ISBN: 978-960-474-186-1 ISSN: 1790-5109 Published by WSEAS Press www.wseas.org

WSEAS



ADVANCED EDUCATIONAL TECHNOLOGIES

6th WSEAS/IASME International Conference on EDUCATIONAL TECHNOLOGIES (EDUTE '10)

Kantaoui, Sousse, Tunisia May 3-6, 2010

Sponsor and Organizer: University of Sfax, Faculty of Sciences of Sfax

ISSN: 1790-5109

ISBN: 978-960-474-186-1

Recent Advances in Computer Engineering A Series of Reference Books and Textbooks

ADVANCED EDUCATIONAL TECHNOLOGIES

6th WSEAS/IASME International Conference on EDUCATIONAL TECHNOLOGIES (EDUTE '10)

Kantaoui, Sousse, Tunisia, May 3-6, 2010

Sponsor and Organizer: University of Sfax, Faculty of Sciences of Sfax

Recent Advances in Computer Engineering A Series of Reference Books and Textbooks

Published by WSEAS Press www.wseas.org

Copyright © 2010, by WSEAS Press

All the copyright of the present book belongs to the World Scientific and Engineering Academy and Society Press. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of the Editor of World Scientific and Engineering Academy and Society Press.

All papers of the present volume were peer reviewed by two independent reviewers. Acceptance was granted when both reviewers' recommendations were positive.

See also: http://www.worldses.org/review/index.html

ISSN: 1790-5109

ISBN: 978-960-474-186-1



World Scientific and Engineering Academy and Society

ADVANCED EDUCATIONAL TECHNOLOGIES

6th WSEAS/IASME International Conference on EDUCATIONAL TECHNOLOGIES (EDUTE '10)

Kantaoui, Sousse, Tunisia May 3-6, 2010

Sponsor and Organizer: University of Sfax, Faculty of Sciences of Sfax

Editors:

Prof. Ali Kallel, Dean of the Faculty of Sciences, Sfax University, TUNISIA

Prof. Abdelhamid Hassairi, Sfax University, TUNISIA

Prof. Cornelia Aida Bulucea, University of Craiova, ROMANIA

Prof. Nikos Mastorakis, Technical University of Sofia, BULGARIA

International Program Committee Members:

Isil Acikalin, TURKEY

Rozhan M. Idrus, MALAYSIA

Angela Repanovici, ROMANIA

John Tsitsiklis, USA

Irwin W. Sandberg, USA

Lotfi A. Zadeh, USA

Viola Vogel, SWITZERLAND

Dimitris Bertsekas, USA

Lena Valavani, USA

Leonid G. Kazovsky, USA

Leon O. Chua, USA

Brian A. Barsky, USA

K. R. Rao, USA

Bimal K. Bose, USA

Joseph Sifakis, FRANCE

Paul E. Dimotakis, USA

Sidney Burrus, USA

Biswa Nath Datta, USA

George Giannakis, USA

Nikolaos Bourbakis, USA

Nikos E. Mastorakis, BULGARIA

Yorgo Istefanopulos, TURKEY

George E Andrews, USA

Stuart S. Antman, USA

Soren H. Morup, DENMARK

Robert A. Kosinski, POLAND

Ivan L'Heureux, Canada

Alexander G. Ramm, USA

Steven Collicott, USA

Wilfried B. Kraetzig, GERMANY

Panos Pardalos, USA

Ronald Yager, USA

Stamatios Kartalopoulos, USA

Kleanthis Psarris, USA

Borje Forssell, NORWAY

Metin Demiralp, TURKEY

Constantin Udriste, ROMANIA

Amauri Caballero, USA

Geir Oien, Norway

George Vachtsevanos, USA

Spyros Tragoudas, USA

Olga Martin, ROMANIA

Demetrios Kazakos, USA

Gamal Elnagar, USA

Periklis Papadopoulos, USA

Preface

This year the 6th WSEAS/IASME International Conference on EDUCATIONAL TECHNOLOGIES (EDUTE '10) was held in Kantaoui, Sousse, Tunisia, May 3-6, 2010. The conference remains faithful to its original idea of providing a platform to discuss advanced educational software and hardware, advanced technology and human resource issues, agent-based educational technology, curriculum design and development, digital libraries and education, distance learning and distance teaching, faculty and professional development, interactive learning environments, management of educational institutes, policies on technology-based education, post-university education and training, security aspects in education, streaming multimedia technologies, teacher evaluation in an integrated educational environment, virtual reality and modern education, vocational training etc. with participants from all over the world, both from academia and from industry.

Its success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The accepted papers of this conference are published in this Book that will be indexed by ISI. Please, check it: www.worldses.org/indexes as well as in the CD-ROM Proceedings. They will be also available in the E-Library of the WSEAS. The best papers will be also promoted in many Journals for further evaluation.

A Conference such as this can only succeed as a team effort, so the Editors want to thank the International Scientific Committee and the Reviewers for their excellent work in reviewing the papers as well as their invaluable input and advice.

The Editors

Table of Contents

Plenary Lecture 1: Measuring the Visibility of the Universities' Scientific Production using Scientometric Methods Angela Repanovici	12
Principals and Technology Use Mojgan Afshari, Kamariah Abu Bakar, Wong Su Luan, Marjan Afshari	13
Exploring the Effectiveness of using GeoGebra and e-Transformation in Teaching and Learning Mathematics Kamariah Abu Bakar, Ahmad Fauzi Mohd Ayub, Rohani Ahmad Tarmizi	19
The Computer in the Teaching of Mathematics Ana Julia Viamonte	24
Academic Entrepreneurship and Innovation in Higher Education: An Integrated Framework for Malaysian Universities Mohar Yusof, Zulkiflee Abdul-Samad, Fadzil Hassan, Zuhairuse Md. Darus, Mohammad Fadhil Mohammad, Azami Zaharim	30
Enhancing Employability of Graduates through Educational Collaborations with Professional Institutions: The Experience of the Faculty of Built Environment, University of Malaya Zulkiflee Abdul-Samad, Hamzah Abdul-Rahman, Fadzil Hassan, Zuhairuse Md. Darus, Azami Zaharim, Mohammad Fadhil Mohammad	36
An Explatory Study on Peer Learning Experiences in the Architectural Design Studio Ismail Shamsuddin, Fadzil Hassan, Masran Saruwono, Roshana Takim, Zuhairusse Md. Darus	42
Taking Advantage of ITC by Teachers at the Primary School Martina Manenova, Martin Skutil, Pavel Zikl	48
<u>Informational Technology in Teaching Geography and Exploring Orlovaca Cave</u> Milovan Pecelj, Danimir Mandic, Miroljub Milincic, Milica Pecelj, Jelena Pecelj	53
Recursively Defined Sequences and CAS Pavel Prazak	58
<u>Multimedia Applications as an Effective Complement to the Educational Process</u> <i>Eva Milkova</i>	62
Modelling of a Real Situation as a Method of the Algorithmic Thinking Development Stepan Hubalovsky, Eva Milkova	68
Method of "Focus Groups" in Practice: Psychology of Minorities Eva Svarcova	73
The Role of ICT in the Lives of Senior Citizens Monika Zumarova	77

Agrieconomic Profession in Serbia in the Process of Accreditation Radovan Tomic, Danilo Tomic, Gordana Tomic	83
Students' Communication in On-Line Courses Ivana Simonova, Petra Poulova, Martin Bilek	87
<u>Utilization of Learning Management System Portal: Perspective from Higher Education</u> <u>Students</u> Ahmad Fauzi Mohd Ayub, Rohani Ahmad Tarmizi, Wan Marzuki Wan Jaafar, Wan Zah Wan Ali, Wong Su Luan	93
<u>Techniques and Tools used in Archive Work Applicable to the Teaching Process</u> <i>Mariana Borcoman</i>	98
Interdisciplinary Mechatronics Systems Analysis in the Perspective of a Performance Vocational Education Luciana Cristea, Angela Repanovici, Mihaela Baritz, Ioana Nicolae	103
Cognitive Virtual Learning Used for Improving the Long Term Handling Skills Mihaela Baritz, Diana Cotoros, Angela Repanovici, Liliana Rogozea	107
Teacher Training in Media Education: Media Use versus the Development of Critical and Reflexive Competencies Vitor Tome, Maria Helena Menezes	111
Intercultural Openings of the Technological Education Stan Panturu, Cornelia Cocan	117
Measuring the Visibility of the Universities' Scientific Production using Scientometric Methods Angela Repanovici	123
Experiential Outdoor Learning by Educational Tourism and Ecological Activities Roxana Enoiu, Elena Moldovan, Razvan Sandu Enoiu, Silviu Gabriel Cioroiu	129
Analysis of Particular Netspeak Elements in Closed Discussion within the Information and Communication Technologies Course Karmela Aleksic-Maslac, Dina Vasic, Jagoda Poropat Darrer	134
Bioethics, Technical and Scientific Progress in Medicine - An Educational Point of View- Liliana Rogozea, Florin Leasu, Luciana Cristea, Gabriela Sechel	140
<u>Technology Enhanced Collaborative Learning for Learning of Calculus</u> Rohani Ahmad Tarmizi, Ahmad Fauzi Mohd Ayub, Kamariah Abu Bakar, Aida Suraya Mohd Yunus	145
A Robotic Competition: A Classroom Experience in a Vocational School Marzia Pisciotta, Bruno Vello, Claudio Bordo, Giovanna Morgavi	151
ICT Contribution to the Process of E-learning Implementation in the Field of Education Petra Poulova, Marcela Sokolova, Ivana Simonova	157
An Exploration into Clinical Legal Education Shuyun Sun, Jie Hou	162
On the Teaching Objectives and Special Features of Clinical Legal Education Shuyun Sun, Jie Hou	166

Research of Values of Clinical Legal Education in China	170
Shuyun Sun, Yanmei Huo, Ruiling Feng	
The Role of Collaborative Learning in Universities and its Further Impact on the Professional	174
<u>Development</u>	
Gabriela Popa, Madalina-Maria Iosifescu, Nicoleta-Aurora Popescu	
Evaluation of Concepts Understanding	178
Sylvia Encheva	
Measurement and Assessment of Learning Management System Usage	183
Lejla Abazi-Bexheti, Arbana Kadriu, Lule Ahmedi	
Investigating Relationship Between Self-Efficacy, Achievement Motivation, And Learning	187
Strategies Of UKM Undergraduate Students	
Rohaty Mohd Majzub, Muhammed Yusuf	
Authors Index	191

Plenary Lecture 1

Measuring the Visibility of the Universities' Scientific Production using Scientometric Methods



Professor Angela Repanovici Transilvania University Brasov ROMANIA

E-mail: arepanovici@unitbv.ro

Abstract: Paper presents scientometry as a science and a fundamental instrument for determining the international value of an university as well as for the statistical evaluation of scientific research results. The impact of the research measurable through scientometric indicators is analyzed.

Promoting the scientific production of universities through institutional digital repositories deals with the concept of scientific production of the university and the development of scientific research in information society. These concepts are approached through the prism of marketing methods and techniques.

The digital repository is analyzed as a PRODUCT, destined for promoting, archieving and preserving scientific production. Using the marketing mix, the digital repository is analyzed as a new technological product, an instrument for quantifying, preserving, disseminating and promoting the university's scientific production.

A special attention is granted to the behaviour of both the producer and the user of information in the academic environment.

Brief Biography of the Speaker:

Professional Activity: Professor at the Fine Mechanics and Mechatronics Department, Mechanical Engineering Faculty and Department of Library Science, Letters Faculty, Transilvania University of Brasov,Romania.. COMPETENCIES SKILLS: Information literacy,Information science, Typografic and digitization systems, Management of infodocumentary systems, Informatization systems. SCIENTIFIC ACTIVITY:Books published in main publishing houses: 8; Articles published: 157; Patents: 1.

Research Activity: Director of 5 research national projects in engineering applied in library science.

Initiation and Development of International Programmes:

LEONARDO DA VINCI PROJECT 2005-2006: No. RO/2005/95006/EX;

LEONARDO DA VINCI PROJECT 2003-2004: No. RO/2003/PL 91017/EX