



Editors:

Prof. Leonid Perlovsky, Harvard University, USA

Prof. Dionysios D. Dionysiou, University of Cincinnati, USA

Prof. Lotfi A. Zadeh, University of Berkeley, USA

Prof. Miliivoje M. Kostic, Northern Illinois University, USA

Prof. Concepcion Gonzalez-Concepcion, Universidad de La Laguna, Spain

Prof. Helmut Jaberg, University of Technology Graz, Austria

Prof. Nikos E. Mastorakis, Technical University of Sofia, Bulgaria

Prof. Azami Zaharim, National University of Malaysia (UKM), Malaysia

Prof. Kamaruzaman Sopian, Universiti Kebangsaan, Malaysia

Advanced Educational Technologies

Proceedings of the 5th WSEAS/IASME International Conference on
EDUCATIONAL TECHNOLOGIES (EDUTE' 09)

University of La Laguna, Tenerife, Canary Islands, Spain, July 1-3, 2009

ULL | Universidad
de La Laguna

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

ISBN: 978-960-474-092-5

ISSN: 1790-5109



Published by WSEAS Press
www.wseas.org

Advanced Educational Technologies



ULL | Universidad
de La Laguna

Advanced Educational Technologies

**Proceedings of the 5th WSEAS/IASME International Conference on
EDUCATIONAL TECHNOLOGIES (EDUTE' 09)**

**University of La Laguna, Tenerife, Canary Islands
Spain, July 1-3, 2009**

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

Published by WSEAS Press
www.wseas.org

ISSN: 1790-5109
ISBN: 978-960-474-092-5

Advanced Educational Technologies

**Proceedings of the 5th WSEAS/IASME International Conference on
EDUCATIONAL TECHNOLOGIES (EDUTE' 09)**

**University of La Laguna, Tenerife, Canary Islands
Spain, July 1-3, 2009**

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

Published by WSEAS Press
www.wseas.org

Copyright © 2009, 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: 978-960-474-092-5



World Scientific and Engineering Academy and Society

Advanced Educational Technologies

**Proceedings of the 5th WSEAS/IASME International Conference on
EDUCATIONAL TECHNOLOGIES (EDUTE' 09)**

**University of La Laguna, Tenerife, Canary Islands
Spain, July 1-3, 2009**

Editors:

Prof. Leonid Perlovsky, Harvard University, USA
Prof. Dionysios D. Dionysiou, University of Cincinnati, USA
Prof. Lotfi A. Zadeh, University of Berkeley, USA
Prof. Milivoje M. Kostic, Northern Illinois University, USA
Prof. Concepcion Gonzalez-Concepcion, Universidad de La Laguna, Spain
Prof. Helmut Jaberg, University of Technology Graz, Austria
Prof. Nikos E. Mastorakis, Technical University of Sofia, Bulgaria
Prof. Azami Zaharim, National University of Malaysia (UKM), Malaysia
Prof. Kamaruzaman Sopian, Universiti Kebangsaan, Malaysia

International Program Committee Members:

| | |
|-----------------------|-------------------|
| Mark Ablowitz | Ricardo Carretero |
| Nail Akhmediev | Otis Wright |
| Gino Biondini | Harvey Segur |
| Andy Ludu | Boa-Feng Feng |
| Jerry Bona | |
| Brian Straughan | |
| John Carter | |
| Min Chen | |
| Dmitry Pelinovsky | |
| Constance Schober | |
| Thiab Taha | |
| Jianke Yang | |
| Walter Craig | |
| Panayotis Kevrekidis | |
| Boris Malomed | |
| Pedro Jordan | |
| Yuji Kodama | |
| David Kaup | |
| Jared Bronski | |
| Roy Choudhury | |
| Athanassios Fokas | |
| Greg Forest | |
| Gregor Kovacic | |
| Philippe Guyenne | |
| Bernard Deconick | |
| Frederic Dias | |
| Emilian Parau | |
| Vassilios Dougalis | |
| David Nicholls | |
| Robert Buckingham | |
| Jeffery DiFranco | |
| Kenichi Maruno | |
| Zhijun Qiao | |
| William Kath | |
| Richard Kollar | |
| Alex Himonas | |
| David Trubatch | |
| Henrik Kalisch | |
| Sarbarish Chakravarty | |
| David Cai | |
| Peter Miller | |
| Paul Bennett | |
| Jennifer Gorsky | |
| Prabir Daripa | |
| M. F. Mahmood | |

Preface

This year the 5th WSEAS/IASME International Conference on EDUCATIONAL TECHNOLOGIES (EDUTE' 09) was held in the University of La Laguna, Tenerife, Canary Islands, Spain. 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, changes and challenges in engineering education, distributed learning environments 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

| | |
|--|----|
| <u>Plenary Lecture 1: Direct/Indirect Language Use of Teachers</u> | 10 |
| <i>Isil Acikalin</i> | |
| <u>Plenary Lecture 2: Learner Continuum Technology Enhanced Learning Model via Technogy</u> | 11 |
| <i>Rozhan M. Idrus</i> | |
| <u>Some Innovative Methods to Improve the Quantity and Quality of Engineering Education and Research</u> | 13 |
| <i>Vijayan Gurumurthy Iyer</i> | |
| <u>Plagiarism: Students' Perception</u> | 28 |
| <i>Zaigham Mahmood</i> | |
| <u>Frequent Sets Mining for Problem Identification</u> | 33 |
| <i>Sylvia Encheva</i> | |
| <u>Enabling Creative Learning Contexts with Mobile Devices: the Youngsters' Perspective</u> | 38 |
| <i>Claudia Fernandes, Luis Rocha</i> | |
| <u>The Relationship Between FI Listening Anxiety and FL Listening Strategies: the Case of Turkish EFL Learners</u> | 44 |
| <i>Mehmet Gonen</i> | |
| <u>The Sources of Foreign Language Reading Anxiety of Students in a Turkish EFL Context</u> | 50 |
| <i>Ipek Kuru-Gonen</i> | |
| <u>A Laboratory Exercise to Estimate the Figure of Merit Index of Power MOSFETS</u> | 56 |
| <i>Elena Niculescu, Dorina-Mioara Purcaru, Marian Maria, Mariuscristian Niculescu</i> | |
| <u>Direct/indirect Language use of Teachers</u> | 62 |
| <i>S. Isil Acikalin</i> | |
| <u>Docimological Perspectives on the Computer Assessment Method in Engineering Classes</u> | 66 |
| <i>Razvan Raducanu</i> | |
| <u>Linking High Education and Research using Free Software: Two Experiences with R.</u> | 70 |
| <i>Gabriel Ibarra-Berastegi, Unai Ganzedo, Jon Saenz, Agustin Ezcurra, Inigo Errasti, Ana Elias, Astrid Barona, Leyre Insausti</i> | |
| <u>Intelligent Measurement System with Strain Gauge Sensor for Engineering Education</u> | 75 |
| <i>Dorina Purcaru, Cornelia Gordan, Ion Purcaru, Marius Niculescu</i> | |
| <u>Implementing Secure Processes in On-Line Examsworflow</u> | 81 |
| <i>Sharil Tumin, Sylvia Encheva</i> | |
| <u>University Network – Efficiency of Virtual Mobility</u> | 87 |
| <i>Petra Poulova, Miloslava Cerna, Libuse Svobodova</i> | |

| | |
|--|-----|
| <u>Language Educational Portals</u> | 93 |
| <i>Miloslava Cerna, Petra Poulouva</i> | |
| <u>CSCW as Accessibility Tool</u> | 99 |
| <i>Fernando Paniagua Martin, Ricardo Colomo Palacios, Angel Garcia Crespo, Belen Ruiz Mezcuca</i> | |
| <u>The Role of Discussion Boards in Facilitating Communities of Inquiry: a Case of ICT and Sociology Courses at Zagreb School of Economics and Management</u> | 104 |
| <i>Karmela Aleksic-Maslac, Masha Magzan, Visnja Juric</i> | |
| <u>Environmental Risk Perception, Attitudes, and Behaviors and Educational Strategies to Shape Friendly Environmentally Behavior</u> | 110 |
| <i>Valeria Laza, Lucia Lotrean, Aurelia Pintea, Alexandru Zeic</i> | |
| <u>A Semantic Web Intelligent Tutoring System Characteristics</u> | 117 |
| <i>Panagiotis Kalagiakos</i> | |
| <u>Developing Mobile Software Solutions to Offer University Administrative Services using Mobile Devices: M-Government Case Study</u> | 121 |
| <i>Majlinda Fetaji, Bekim Fetaji, Fadil Zendeli, Visar Elmazi, Ljupco Antovski</i> | |
| <u>Multicultural Approach and Information Communication Technology in Arabic Language Teaching: Research on Indonesian Pesantren</u> | 127 |
| <i>Maimun Aqsha Lubis, Ismail Suardi Wekke, Melor Md. Yunus, Norazah Mohd. Nordin</i> | |
| <u>Language Learning Via ICT: Students' Experience</u> | 136 |
| <i>Melor Md Yunus, Maimun Aqsha Lubis, Chua Pei Lin, Ismail Suardi Wekke</i> | |
| <u>IT Literacy of Language Teachers in Malaysian Technical Schools</u> | 143 |
| <i>Norizan Abdul Razak, Mohamed Amin Embi, Ramlee B. Mustapha, Maimun Aqsha Lubi</i> | |
| <u>ICT Education: Challenges and Prospects</u> | 151 |
| <i>Seyed A. Shahrestani</i> | |
| <u>Work in Progress: a Case Study of Usability Testing of Software Tools for People with Learning Disabilities</u> | 157 |
| <i>Onintra Poobrasert</i> | |
| <u>Educational Technology on Teaching and Learning of Islamic Education in Brunei Darussalam</u> | 162 |
| <i>Maimun Aqsha Lubis, Ramlee Mustapha, Ismail Suardi Wekke, Rohaty Mohd. Majzub</i> | |
| <u>The Development of Information and Communication Technologies (ICT) on Islamic Pedagogy in West Africa</u> | 171 |
| <i>Maimun Aqsha Lubis, Mohammed Diao, Ramlee Mustapha, Ismail Suardi Wekke</i> | |
| <u>The Perception of African Teachers on Strategy and Technology in Teaching and Learning Islamic Education</u> | 180 |
| <i>Maimun Aqsha Lubis, Nik Mohd Rahimi Nik Yusoff, Mohd Isa Hamzah, Ismail Suardi Wekke</i> | |
| <u>The Integration of ICT in the Teaching and Learning Processes: a Study on Smart School of Malaysia</u> | 189 |
| <i>Maimun Aqsha Lubis, Siti Rahayah Ariffin, Tajul Arifin Muhamad, Mohammed Sani Ibrahim, Ismail Suardi Wekke</i> | |

| | |
|--|-----|
| <u>Learner Continuum Technology Enhanced Learning Model Via Technogogy</u> | 198 |
| <i>Rozhan M. Idrus</i> | |
| <u>Student's Perceptions of Technical Appliance in E-Learning</u> | 202 |
| <i>Issham Ismail, Rozhan M. Idrus, Azidah Abu Ziden, Fong Soon Fook</i> | |
| <u>The Types of Online Interaction Model: Individual Approaches in Online Discussions</u> | 206 |
| <i>Azidah Abu Ziden, Fong Soon Fook, Rozhan M. Idrus, Issham Ismail</i> | |
| <u>The Development of Context-Aware Ubiquitous English Learning System</u> | 212 |
| <i>Jin Tan Yang, Yen-Ming Huang, Ching-Jung Liao</i> | |
| <u>Education for All: Meeting Millennium Development Goals Via the Telecenters</u> | 218 |
| <i>Norizan Abdul Razak, Jalaludin Abdul Malek</i> | |
| <u>Authors Index</u> | 221 |

Plenary Lecture 1

Direct/Indirect Language Use of Teachers



Associate Professor Isil Acikalin

Anadolu Universitesi

Education Faculty

Department of Foreign Languages

E-mail: iacikali@anadolu.edu.tr

Abstract: This study is concerned with teachers' language use in classroom. Teachers may use either direct or indirect language style which may be related to the structure of power relationship that teachers and students build in classroom.

It is true that the use of politeness formulas and indirect stating are associated with good and effective teaching. So the study aims at investigating to what extent elementary school teachers use polite and indirect discourse studies.

The results will be evaluated according to the questionnaire given to the teachers of elementary school. The questionnaire is formed according to the topics that arouse in the focus group meeting.

Brief Biography of the Speaker: Isil Acikalin is a faculty member at the Department of Foreign Language Education at Anadolu University/Turkey. She has a MA. And Ph.D. in English Linguistics with emphasis on sociolinguistics. She conducts research on language variation, linguistic gender differences, Turkish medical language and communication of doctors with their patients. She has published several research studies in both national and international peer-reviewed journals.

Plenary Lecture 2

Learner Continuum Technology Enhanced Learning Model via Technogogy



Professor Rozhan M. Idrus
School of Distance Education
Universiti Sains Malaysia
E-mail: rozhanmidrus@gmail.com

Abstract: Despite the lip service paid to individual differences, traditional education has failed to move away from the group mentality that has driven it for so many years. The very language of education, which separates students into grades, classes, honors, average, even learning 'styles,' forces the mind into perceiving groups, not individuals. Technology is defined as the convergence of technology, pedagogy and content in the transformative use of technology to foster learning. The relationship between technology, pedagogy and content in a converging role has been deliberated from a three-dimensional perspective such that we can teach a certain (learner-based) content in a certain way using a certain technology, giving rise to the creation of a unique learning object. The application of technology will now witness the presentation of content in a continuum rather than a segmented approach for a specific cohort., each level taking into account the learner characteristics, learning styles and preferences and the production of a variety of appropriate media components to support, complement or for the purpose of teaching and knowledge retention, giving rise towards individualised learning and personalisation. Then on, we can create a 'directory' of learning objects.

Brief Biography of the Speaker: Rozhan M. Idrus is a Professor of Open and Distance Learning (ODL) & Technogogy in the School of Distance Education at the Universiti Sains Malaysia in Malaysia. He hold a PhD in Physics and has been active in ODL for more than 20 years. He is the Chief Editor of both the International Journal of Excellence in eLearning (Dubai) and the Malaysian Journal of Educational Technology. He has presented 11 keynote addresses and published more than 150 scholarly works in refereed journals.