



EDUCATION IN A CHANGING SOCIETY - 2012



EDUCATION IN A CHANGING SOCIETY - 2012

Scientific Methodical Center "Scientia Educologica", Lithuania, the associated member of Lithuanian Scientific Society and ICASE (International Council of Associations for Science Education)

The articles appearing in this scientific collection are indexed and abstracted in EBSCO: Education Research Complete (http://search.ebscohost.com), Copernicus Index (http://www.indexcopernicus.com), the Asian Education Index (http://www.asian-education-index.com/education_journals_index_P.php), SOCOLAR, China Educational Publications Import & Export Corporation (http://www.socolar.com/?ver=en), Cabell Publishing, Inc., Directories of Academic Journals (http://www.cabells.com/index.aspx), Contemporary Science Association/AAP databases (http://www.contemporaryscienceassociation.net/journal/view/1190), and list of Science Education Journals (http://homepages.wmich.edu/~rudged/journals.html)

Publisher

Scientific Methodical Center "Scientia Educologica", Lithuania, the Associated Member of Lithuanian Scientific Society, the Association of Lithuanian Serials, European Society for the History of Science (ESHS) and International Council of Associations for Science Education (ICASE)

Editor-in-Chief

Dr., Prof. Vincentas Lamanauskas, Scientific Methodical Centre "Scientia Educologica", Republic of Lithuania

Editorial Board

Dr., Prof. Boris Aberšek, University of Maribor, Slovenia

Dr. Saleh A. Alabdulkareem, King Saud University, Saudi Arabia

Dr., Prof. Agnaldo Arroio, University of São Paulo, Brazil

Dr., Prof. Martin Bilek, Hradec Kralove University, Czechia

Dr., Prof. Andris Broks, University of Latvia, Latvia

Dr. **Paolo Bussotti**, Commission for the Publication of the National Edition of Federigo Enriques's Works, Italy

Dr. Muammer Calik, Karadeniz Technical University, Turkey

Dr., Prof. Janis Gedrovics, Riga Teacher Training and Educational Management Academy, Latvia

Dr., Harun Yilmaz, Scientific and Technological Research Council of Turkey, Turkey

Dr., Angela James, University of Kwazulu – Natal, South Africa

Dr., Prof. Vladimir S. Karapetyan, Armenian State Pedagogical University named after Kh. Abovyan, Armenia

Dr. Kuo-Hung Huang, National Chiayi University, Taiwan

Dr. Milan Kubiatko, Masaryk University, Czech Republic

Dr., Prof. Miroslaw Kowalski, University of Zielona Gora, Poland

Dr. Todar T. Lakhvich, Belarusian State M. Tank Pedagogical University, Republic of Belarus

Dr. Eleonora Melnik, Karelian State Pedagogical University, Republic of Karelia, Russia

Dr., Prof. Danuše Nezvalova, Palacky University, Czechia

Dr., Prof. Yuriy Pelekh, International University of Economics and Humanities named after Academician Stepan Demianchuk, Ukraine

Dr., Raffaele Pisano, Cirphles École Normale Supérieure, France

Dr. Uladzimir K. Slabin, University of Oregon, USA

Dr. Laima Railienė, Scientific Methodical Centre "Scientia Educologica", Republic of Lithuania

Dr., Prof. Borislav V. Toshev, Sofia University, Bulgaria

Dr., Prof. Milan Turčani, Constantine the Philosopher University, Slovakia

Dr., Prof. Nicos Valanides, University of Cyprus, Cyprus

Copyright of this volume entitled **Education in a Changing Society** – **2012** is the property of Scientific Methodical Centre "Scientia Educologica", Lithuania. All rights reserved. No part of this volume may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the copyright holders.

Problems of Education in the 21st Century is an international, periodical, peer reviewed scientific journal, issued by the SMC "Scientia Educologica" in Cooperation with Scientia Socialis.

Address: Scientific Methodical Centre "Scientia Educologica"

Donelaičio Street 29, LT-78115 Siauliai, Lithuania

E-mail: problemsofeducation@gmail.com

Phone: +370 687 95668

WEB page: http://www.gu.projektas.lt; http://www.jbse.webinfo.lt/Problems of Education.htm

ISSN 1822-7864

© SMC "Scientia Educologica", Lithuania, 2012