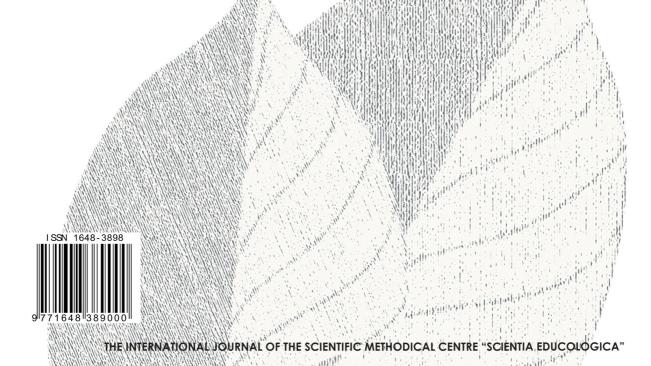
Vol. 12, No. 5, 2013

ISSN 1648-3898







Journal of Baltic Science Education



Editorial Board

Editor-in-Chief

Prof., Dr. Vincentas Lamanauskas Siauliai University, Lithuania

Deputy Editor-in-Chief

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

Executive Secretary

Dr. Laima Railienė Scientific Methodical Center "Scientia Educologica", Lithuania

Editors:

Prof., Dr. Boris Aberšek University of Maribor, Slovenia Prof., Dr. Agnaldo Arroio University of Sao Paulo, Brazil

Prof., Dr. Martin Bilek University of Hradec Králové, Czech Republic

Dr. Paolo Bussotti

Commission for the Publication of the National Edition of Federigo

Enriques's Works, Italy

Dr. Bulent Cavas
Prof., Dr. Hana Čtrnáctová
Dr. Peter Demkanin
Dr. Peter Demkanin
Dr. Pokuz Eylul University, Turkey
Charles University, Czech Republic
Comenius University, Slovakia

Prof., Dr. Jānis Gedrovics Riga Teacher Training and Educational Management

Academy, Latvia

Prof., Dr. Ryszard M. Janiuk Maria Curie Sklodowska University, Poland Dr. Milan Kubiatko Masaryk University, Czech Republic

Dr. Todar Lakhvich

Belarusian State Pedagogical University named after Maxim Tank,

Republic of Belarus

Prof., Dr. Jari Lavonen University of Helsinki, Finland

Dr. Rita Makarskaitė-Petkevičienė Lithuanian University of Educational Sciences, Lithuania

Prof., Dr. Aadu Ott Göteborg University, Sweden
Dr. Paul Pace Malta University, Malta
Prof., Dr. Valfrids Paškevičs Daugavpils University, Latvia
Prof., Dr. Jongwon Park Chonnam National University, Korea

Dr. Raffaele Pisano European Society for the History of Science, Italy

Dr. Pavol Prokop Institute of Zoology, Bratislava, Slovakia

Dr. Miia Rannikmäe Tartu University, Estonia
Dr. Alona Rauckienė Klaipėda University, Lithuania
Prof., Dr. Heimo Saarikko Helsinki University, Finland
Dr. Uladzimir K. Slabin University of Oregon, USA

Prof., Dr. Valery P. Solomin Herzen State Pedagogical University of Russia, Russia

Prof., Dr. Borislav V. Toshev
Dr. Georgios Tsaparlis
Dr. Muhammet Usak
Sofia University, Bulgaria
University of Ioannina, Greece
Gazi University, Turkey

A scientific journal JBSE issued by the SMC *Scientia Educologica* in cooperation with *Scientia Socialis*, Lithuania, emphasizes theoretical, experimental and methodical studies in the field of science education. JBSE is an international academic journal. In order to maintain the high standards appropriate to such a journal, all contributions received are submitted for anonymous review by two experts, additionally to review by the Editor. The decision of the Editor on the acceptance of articles is final and no correspondence can be entered into on reasons for rejection of a submitted contribution.

Published since 2002 Addre

The journal is published bimonthly. IF-0.226 (2010), 0.425 (2011)

Scientific Methodical Center "Scientia Educologica" Donelaičio Street 29, LT-78115 Siauliai, Lithuania

E-mail: mail.jbse@gmail.com Phone: +370 687 95668

Home page: http://www.scientiasocialis.lt/jbse/

ISSN 1648-3898

© Scientific Methodical Center "Scientia Educologica", Lithuania, The Associated Member of Lithuanian Scientific Society, European Society for the History of Science (ESHS) and ICASE

The articles appearing in this journal are indexed/abstracted in British Education Index
(http://www.leeds.ac.uk/bei/bei.htm), Copernicus Index (http://journals.indexcopernicus.com), The Asian
Education Index (http://www.asian-education-index.com/sciences_index.php), EBSCO: Academic Search Premier
(http://search.ebscohost.com), Social Scisearch (Thomson Reuters) (http://science.thomsonreuters.com/index.html),
Journal Citation Reports / Social Sciences Edition (Thomson Reuters)
(http://thomsonreuters.com/products_services/scientific/Journal_Citation_Reports),
and SCOPUS (http://www.scopus.com)