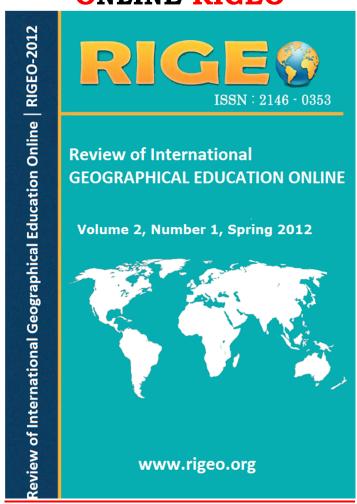
REVIEW OF INTERNATIONAL GEOGRAPHICAL EDUCATION ONLINE-RIGEO



Editor

Eyüp ARTVİNLİ, Eskişehir Osmangazi University, TURKEY

Associate Editors

Hilmi DEMİRKAYA, Akdeniz University, TURKEY
Tino JOHANSSON, University of Helsinki, FINLAND
Rebecca B. THEOBALD, University of Colorado at Colorado Springs, USA
Cemalettin AYAS, University of Sinop, TURKEY

Book Review Editor

Marsha ALIBRANDI, Fairfield University, USA

Editorial Board

Bahattin ACAT, Eskişehir Osmangazi University, TURKEY Yılmaz ARI, University of Balıkesir, TURKEY Sarah W. BEDNARZ, Texas A&M University, USA Richard G. BOEHM, Texas State University, USA **İhsan BULUT,** Atatürk University, TURKEY Hannele CANTELL, University of Helsinki, FINLAND Simon CATLING, Oxford Brooks University, UK Norm CATTO, Memorial University, CANADA Mustafa CIN, University of Giresun, TURKEY Gino DE VECCHIS, Italian Association of Geography Teachers/University of Rome, ITALY Zsuzsa CSASZAR, University of Pecs, HUNGARY Karl DONERT, EUROGEO, BELGIUM Maria Eliza DULAMA, Babes-Bolyai University, ROMANIA Mahesh GAUR, Bangur Government PG College, INDIA **İbrahim GÜNER,** Muğla University, TURKEY **Emrullah GÜNEY,** Dicle University, TURKEY John HALOCHA, Bishop Grosseteste University, UK Hartvig HAUBRIC, Pädagogische Hochschule Freiburg, **GERMANY**

Yoshiyasu IDA, University of Tsukuba, JAPAN

Phil KLEIN, University of Northern Colorado, USA

Joseph J. KERSKI, National Council for Geographic Education (NCGE) & ESRI, USA

Petr KNECHT, Masaryk University, CZECH REPUBLIC **Halil KOCA,** Erzincan University, TURKEY

David LAMBERT, Geographical Association & University of London, UK

John LIDSTONE, Queensland University of technology, AUSTRALIA

Lene Møller MADSEN, University of Copenhagen, DENMARK **Octavian MANDRUT,** Institute of Educational Sciences, ROMANIA

Christian MATZKA, University of Vienna, AUSTRIA **Yoshuyiki NISHIWAKI,** Yokohama National University, JAPAN

Ramazan ÖZEY, Marmara University, TURKEY

Elsa Maria Teixeira PACHECO, University of Porto, PORTUGAL

Fivos PAPADIMITRIOU, Hellenic Open University, GREECE

James PETERSEN, Texas State University, USA

Salman QURESHI, University of Karachi, PAKISTAN

Tatjana RESNIK PLANIN, University of Ljubljana, SLOVENIA

Emilia SARNO, ANSAS Molise/University of Molise, ITALY

Joop van der SCHEE, Free University Amsterdam, THE NETHERLANDS

Saulius SATANAITIS, Vilnius Pedagogical University, LITHUANIA **Sirpa TANI,** University of Helsinki, FINLAND

Ülkü Eser ÜNALDI, Gazi University, TURKEY

Witold WILCZYŃSKI, Pedagogical University of Kraków, POLAND

Hakkı YAZICI, Afyon Kocatepe University, TURKEY

Proofreaders

Mustafa CİN, University of Giresun, TURKEY Cemallettin AYAS, University of Sinop, TURKEY

REVIEW OF INTERNATIONAL GEOGRAPHICAL EDUCATION **ONLINE** Volume 2, Number 1, Spring 2012 From the Guest Editors Michael E. RITTER and Richard B. SCHULTZ...... 4 **Articles** 2.1. A Geospatial Online Instruction Model John C. RODGERS III, Athena OWEN-NAGEL, and 2.2. Effective Online Practices for International **Learning Collaborations** Waverly C. RAY, Osvaldo MUNIZ-SOLARI, 2.3. A Critical Examination of the Teaching Methodologies Pertaining to Distance Learning In Geographic Education: Andragogy in an Adult Online Certificate Program Richard B. SCHULTZ...... 46-60 2.4. Barriers to Teaching Introductory Physical Geography On-line 2.5. Using Technology for Geography Teacher Education: Web-based Professional Development Cheryl A. FRAZIER and Richard G. BOEHM 78-94 2.6. Distance Education and Spatial Citizenship in Africa - Challenges and Prospects Detlef KANWISCHER and Fabienne QUENNET 95-117

2.7. Mapping Geographical Education in Canada: Geography in the Elementary and Secondary Curriculum Across Canada

*** All responsibility of statements and opinions expressed in the articles is upon their authors.

Dear readers of RIGEO,

Welcome to the third issue of the Review of International Geographical Education Online-RIGEO, an online publication which is supported by Eskisehir Osmangazi University in Turkey (ESOGÜ), the Geographical Association in United Kingdom (GA), The National Council for Geographic Education in USA (NCGE), Italian Association of Geography Teachers in Italy (AIIG) and European Association of Geographers (EUROGEO).

The RIGEO will aim to establish new channels of communication tie for the geography education world in general, but for the regions countries and continents such as Asia, Australia, New Zealand, Japan, Africa, Europe, Middle East, North America (USA and Canada), Middle and South America.

Among the goals of the RIGEO are to share experiences on effective use of geographic education in formal and non-formal education, to provide a communication network among geography education experts in order to able to define new strategies for dealing with the issues of geography education.

This special issue of RIGEO is devoted to various aspects of online teaching and learning in geography. It primarily stems from a collection of presentations at the Association of American Geographers (AAG) Conference in Seattle, WA, U.S.A., in 2011, but additional contributions by international researchers have been added to enhance the global experience with teaching and learning online education.

A number of common threads weave this issue together including the notion of how online teaching and learning in geography has evolved with technology, and how diverse student audiences are accommodated in various environments.

Rodgers, et al., offer a compelling pedagogical model for teaching geospatial courses through an online format and evaluating the model's effectiveness. Their perspective represents an American viewpoint that course management software and online learning management systems (LMS) are viable tools in presenting geographical concepts to students in an online setting. Ray, et al. demonstrate how international learning collaborations have been established with their research examining the student learning outcomes for international trials in seven countries in order to develop effective practices for the implementation of online, crosscultural curricula. Their research indicates that the Center for Global Geography Education (CGGE) materials can be used effectively to impart international perspectives about contemporary global issues without the international collaborative element.

In regards to student audiences and learning modalities, Schultz posits a model that invokes andragogy and the work of Malcolm Knowles to encourage deeper learning for adult student audiences. He describes the successful implementation of an online geospatial certificate program designed to address the needs of adult learners. Ritter explores the barriers to teaching physical geography online and offers solutions for overcoming them. A survey of Geography Departments in the United States points to faculty interest, faculty resources, and pedagogical issues as three critical areas of concern about teaching online. Perhaps one of the ways in which that question is answered is via the research by Frazier and Boehm, who suggest that professional development of educators in how to teach online may be an answer to ensuring that online education retains its academic rigor and effectiveness in the remote setting.

The international perspective of this issue is provided by case studies in Africa and Canada. Kanwisher and Quennet, and Segerin offer examples of how various elements of online learning can successfully address issues such as spatial citizenship and

participation for sustainable development in developing nations and the changing pattern of geographical education in developed a developed nation like Canada.

As guest editors of this special issue devoted to online teaching in geography, we hope that this collection of papers clearly illustrates the need for continued development in the effectiveness of online teaching and learning, and promoting the notion that collaboration between the international educational communities continues to flourish in this exciting time of technological advancement.

Michael E. Ritter, Ph.D.

University of Wisconsin-Stevens Point, Wisconsin, U.S.A.

Richard B. Schultz, Ph.D.

Elmhurst College, Illinois, U.SA.

Editors' Note:

The Review of International Geographical Education Online editorial team thanks all our reviewers, not just those whose guidance shaped the articles that appear in this volume, but also those who counseled us on articles needing substantial revision or even rejection. The reviews were timely, constructive, and represent a substantial time commitment on behalf of submitting authors. Thank you for your effort and spending your time for RIGEO. The name of reviewers who reviewed and edited the papers will be published in the last issue of Volume 2 at the end of this year.