Call for Chapter Proposals

Model-Centered Learning with GeoGebra: Theory and Practice in Mathematics Education

INTRO

GeoGebra (www.geogebra.org) is a free, open-source learning and instructional design environment created by Dr. Markus Hohenwarter. Connecting algebra, geometry, and calculus in a dynamic system of multiple representations, GeoGebra allows students to model a wide range of mathematical processes and experiment with a mathematical object. GeoGebra may be installed locally or accessed through the Internet. Dynamic worksheets created using GeoGebra may be easily exported and published on

the Internet. An award-winning invention, GeoGebra brings together an international community of mathematics teachers and students who collectively support the development of the GeoGebra website and contribute innovative ideas to the teaching and learning of mathematics at various grade levels. GeoGebra is currently available in 39 languages and is used by mathematics educators in more than 190 countries in mathematics classrooms, for technology-integrated teacher



professional development, and in teacher preparation programs. As part of the Modeling & Simulations for Learning and Instruction Series, this book will be the first of its kind to review the theory and practice in GeoGebra-based mathematics instruction from a model-centered perspective, identifying the current paradigms of effective instructional design and providing theoretical orientation for future research and software development.

| TARGET AUDIENCE | SUBMISSION INSTRUCTIONS |
|---|---|
| The target audience of this book will be: Researchers in instructional design and mathematics education who may conduct research in the integration of educational technology and mathematics teaching and learning. Mathematics teachers who use or will use GeoGebra in their classroom practice. School administrators and mathematics or technology specialists interested in using affordable and sustainable instructional technology. | Researchers and practitioners are invited to submit a chapter prospectus (title, abstract, and chapter outline) to the book editors on or before August 31, 2008 . Authors of accepted proposals will be notified by October 31, 2008 . First full draft of chapter will be expected by March 31, 2009 . This book is will be published by Sense Publishers in Spring 2010. For more information, please contact the book editors. |
| TOPICS | BOOK EDITORS |
| Topics may be from the following areas and more: 1. Theoretical frameworks for instructional design in a technology-integrated dynamic environment. 2. GeoGebra-based teacher enhancement and teacher preparation programs. | Lingguo Bu & Robert C. Schoen School of Teacher Education, Florida State University 209 Milton Carothers Hall Tallahassee, FL, 32306-4490, USA E-mail: lb04f@fsu.edu, robschoen0307@gmail.com |
| instruction using GeoGebra | SERIES EDITORS |
| Students learning experience with GeoGebra. GeoGebra supporting motivational design, Standards- based instruction, and communities of practice. International perspectives on GeoGebra. | J. Michael Spector, Learning Systems Institute, Florida State University Norbert Seel, Learning Systems Institute, |
| For more information, please see www.geogebra.org/IGI | Florida State University Konrad Morgan , SAMIT, Northern Alberta Institute of Technology |