

International Study Group on the Relations Between the HISTORY and PEDAGOGY of MATHEMATICS An Affiliate of the International Commission on Mathematical Instruction

CALL FOR PAPERS COLLECTIVE VOLUME WITH SELECTED PAPERS BASED ON CONTRIBUTIONS TO RECENT ACTIVITIES OF THE HPM INTERNATIONAL STUDY GROUP

Given the need to distribute more widely in the mathematics education community the ideas discussed at various meetings and activities in progress of the *International Study Group On the Relations between History and Pedagogy of Mathematics* (the HPM Study Group) affiliated to ICMI, the publication of a book based on contributions to these meetings and activities dealing with the integration of a historical dimension in mathematics education is being planned. This book will be similar in nature to the books published after the HPM Group Satellite Meetings of ICME 8, *HEM Braga 96* in Braga, Portugal¹ and ICME 7, *HPM-92* in Toronto, Canada.²

Therefore, all presenters at

- the 5th European Summer University on the History & Epistemology in Mathematics Education (ESU 5), in Prague, Czech Republic, 19-24 July 2007;
- the Topic Study Group 23 (TSG 23) of ICME 11 on *The Role of History of Mathematics in Mathematics Education*, in Monterrey, Mexico, 6-13 July 2008;
- the ASG (Affiliated Study Groups)-meeting of the HPM Group at ICME 11 in Monterrey, Mexico, 6-13 July 2008;
- the *HPM Group Satellite Meeting of ICME 11* (HPM 2008) in Mexico City, Mexico, 14-18 July 2008;
- the Working Group 15 (WG 15) on *The Role of History of Mathematics in Mathematics Education: Theory and Research* of the Congress of the European Society for Research in Mathematics Education (CERME 6), in Lyon, France, January 2009³,

are welcome to submit papers to the editors for acceptance in this book. The submitted papers will be peer-reviewed to international standards and then revised before final acceptance. This volume aims to constitute an all-embracing outcome of recent activities within the HPM Study Group, thus reflecting the spirit of coherence and openness that characterizes this Group since its original formation.

Provisional Title: Recent developments on introducing a historical dimension in mathematics education

¹Using History To Teach Mathematics: An International Perspective, V. Katz (ed.), MAA Notes #51, Washington DC: The Mathematical Association of America, 2000.

²*Vita Mathematica: Historical Research and Integration with Teaching*, R. Calinger (ed.), MAA Notes #40, Washington DC: The Mathematical Association of America, 1996.

³Since CERME 6 is still an activity in progress, papers based on contributions to WG 15 should have been accepted in CERME, before they are considered further for publication in the present volume.

Main Themes: Although papers are welcome dealing with any aspect of introducing a historical dimension in mathematics education, the editors particularly welcome papers dealing with

- theoretical and/or conceptual frameworks for integrating history in mathematics education;

- history and epistemology as tools for an interdisciplinary approach in the teaching and learning of mathematics and the sciences;

- the results of actual classroom experiments in the implementation of history in the teaching of mathematics, both from the cognitive and affective points of view, at all levels of education, including inservice teacher education;

- ways of integrating original sources in the classroom, and their educational effects, preferably with conclusions based on classroom experiments;

- design and/or assessment of teaching & learning materials on the history of mathematics;

- the exploration of possible analogies and parallelism between the historical development and students' cognitive development of mathematical ideas;

- surveys on the existing uses of history in curriculum, textbooks, and/or classrooms in primary, secondary, and university levels.

Submission of papers

Submitted papers should be prepared using either MS Word or LaTeX as a word processor and must be written in English. Therefore, papers originally written in another language should be translated into English. However, the editors will work with the authors to make sure that the English version is in good English style. Papers should be sent electronically to both of the editors of this volume:

Victor Katz, vkatz@udc.edu

Constantinos Tzanakis, tzanakis@edc.uoc.gr

More details on the style and format are included in the attached document.

Time schedule

January 5, 2009: Deadline for submitting full papers.

March 15, 2009: Reviewing reports returned to the editors.

March 30, 2009: Notification of authors.

June 15, 2009: Deadline for submitting papers for which revision has been requested.

July 30, 2009: Reviewing reports on the revised versions of the papers returned to the editors.

August 15, 2009: Final notification of authors.

December 15, 2009: Final editing completed; the book goes to the publisher.

Editors and contact: For any further questions, please contact the editors of this volume:

- Victor Katz, University of the District of Columbia, Washington, DC, USA

Postal address: 841 Bromley St., Silver Spring, MD 20902, USA

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- Constantinos Tzanakis, Department of Education, University of Crete, Greece

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e-mail: tzanakis@edc.uoc.Victor J. Katz and Constantinos Tzanakis

Guidelines on the size and format of papers

Language and word processor: Manuscripts must be written in English and should be prepared using either MS Word or LaTeX as a word processor (please avoid commercial versions of Latex like Scientific Workplace etc). LaTex is preferable for texts with mathematical formulas.

Length of full texts: minimum **3000** and maximum **5000 words**, possibly with 2 additional pages (maximum) of tables and/or figures, not counting the first page.

First page: The first page should include the title, author(s), institutions and their addresses, e-mail addresses, keywords and an abstract not more than **200**.

Figures and pictures: They may be included in the text but they should also be provided **separately** either in jpg, or eps format.

Quotations: Any quotations in the paper from sources in a language other than English, should be included both the original and the English version (the English in the main body of the paper and the original language in a footnote).

Text: The main text should be typed in 12pt fonts, with double spacing and 0.5cm indentation for the first line of each paragraph. For the abstract, footnotes and references use single spacing and 11pt fonts. *References*: For the references, use the following format:

REFERENCES (11pt fonts)

-Artigue, M., 1992, "Functions from an Algebraic and Graphic Point of View: Cognitive Difficulties and Teaching Practices", in *The Concept of Function: Aspects of Epistemology and Pedagogy*, E. Dubinsky & G. Harel (eds.), Washington DC: The Mathematical Association of America, pp. 109-132.

-Fauvel, J., van Maanen, J. (eds.), 2000, *History in Mathematics Education: The ICMI Study*, Dordrecht-Boston-London: Kluwer.

-Mehra J., Rechenberg H., 1982, *The Historical Development of Quantum Theory*, New York: Springer, vol. I.

-Mevarech, Z., 1983, "A deep structure model of students' statistical misconceptions", *Educational Studies in Mathematics* **14**, 415–429.

References in the body of paper should be listed as e.g. "Artigue 1992, p.35", "Fauvel & van Maanen 2000, ch.10" etc.