How Chinese learn mathematics – introducing a new book

Wong Ngai Ying
Department of Curriculum and Instruction,
The Chinese University of Hong Kong

The book "How Chinese Learn Mathematics: Perspectives from Insiders" edited by Prof L. Fan (Nanyang Technological University, Singapore), Prof N.Y. Wong (The Chinese University of Hong Kong, Hong Kong), Prof J. Cai (The University of Delaware, USA) and Prof S. Li (East China Normal University, China) is just published by World Scientific as the first volume of its Series on Mathematics Education.   The phenomenon of Chinese learners, how they learn mathematics in particular, has been a focus of interest among psychologists, sociologists and educators in the past decades.   After the intensive work in the past four years, with the support and advice of Prof D. Zhang (East China Normal University, China), Prof P.Y. Lee (Nanyang Technological University, Singapore) and Prof F.L. Lin (National Taiwan Normal University, Taiwan), and Prof L. Gu (Shanghai Academy of Educational Sciences, China), the book came to its existence.   It is the first time that a group of active Chinese academics (with some non-Chinese collaborators) telling the English speaking world how Chinese learn mathematics.   Attached below is the table of content for those who are interested.   One may also browse   http://www.worldscibooks.com/ mathematics/5629.html   for further information.

Contents

- Thinking Mathematically by Chinese Learners: A Cross-National Comparative Perspective (CAI Jinfa & CIFARELLI Victor)

- An Examination of Coherence in a Chinese Mathematics Classroom (WANG Tao, & MURPHY John)

- A Chinese Cultural Model of Learning (LI Jin)

- Official Curriculum in Mathematics in Ancient China: How did Candidates Study for the Examination? (SIU Man Keung)

Section 2   Context and Teaching Materials

- The "Two Basics": Mathematics Teaching and Learning in Mainland China (ZHANG Dianzhou, LI Shiqi, & TANG Ruifen)

- A Comparative Study on Composite Difficulty Between New and Old Chinese Mathematics Textbooks (BAO Jiansheng)

- Textbook Use Within and Beyond Chinese Mathematics Classrooms: A Study of 12 Secondary Schools in Kunming and Fuzhou of China (FAN Lianghuo, CHEN Jingan, ZHU Yan, QIU Xiaolan, & HU Qiuzhong)

- Thorough Understanding of the Textbook: A Significant Feature of Chinese Teachers Manuals (LI Jianhua)

- Effects of Cram Schools on Children's Mathematics Learning (HUANG Hsin Mei)

Section 3   Pedagogy and Learning Processes

- Teaching with Variation: A Chinese Way of Promoting Effective Mathematics Learning (GU Lingyuan, HUANG Rongjin, & MARTON Ference)

- Cracking the Paradox of Chinese Learners: Looking Into the Mathematics Classrooms in Hong Kong and Shanghai (HUANG Rongjin & LEUNG Koon Shing Frederick)

- Identifying a Pattern of Teaching: An Analysis of a Shanghai Teacher's Lessons (LOPEZ-REAL Francis, MOK Ah Chee Ida, LEUNG Koon Shing Frederick, & MARTON Ference)

- Differences within Communalities: How Mathematics is Taught is Rural

and Urban Regions in Mainland China? (MA Yunpeng, ZHAO Dongchen, & TUO Zhongfei)

- Teaching Approach: Theoretical or Experimental? (LI Jun)

- Capturing the Chinese Way of Teaching: The Learning-Questioning and Learning-Reviewing Instructional Model (AN Shuhua)

- The Effects of Different Representations on Mathematics Learning of Chinese Children (XU Binyan)

Section 4　　Inspiration and Future Directions

- The CHC Learner's Phenomenon: Its Implications on Mathematics Education (WONG Ngai Ying)

- How Chinese Learn Mathematics?　Some Evidence-Based Insights and Needed Directions (CAI Jinfa, LIN Fou-Lai, & FAN Lianghuo)

Series on Mathematics Education vol. **1**

Edited by

Fan Lianghuo • Wong Ngai-Ying
Cai Jinfa • Li Shiqi

HOW **CHINESE**
LEARN MATHEMATICS
Perspectives from Insiders