Contents

Part I Chronicling Educational Challenges and Development

1 Introduction .................................................................................................................. 3
   Julia V. Clark

2 Closing the Achievement Gap: A Systemic View ................................................. 7
   Linda Darling-Hammond

3 Teacher Qualification and the Achievement Gap: A Cross-National Analysis of 50 Countries .......................................................... 21
   Motoko Akiba and Guodong Liang

Part II North America

4 Addressing the Achievement Gap in the United States ................................. 43
   Julia V. Clark

5 Closing the Science, Mathematics, and Reading Gaps from a Canadian Perspective: Implications for Stem Mainstream and Pipeline Literacy .................................................................................. 73
   Larry D. Yore, Leslee Francis Pelton, Brian W. Neill, Tim W. Pelton, John O. Anderson and Todd M. Milford

6 Achievement Gap in Mexico: Present and Outlook ........................................ 105
   Armando Sanchez-Martinez

Part III South America

7 Racial Achievement Gaps in Another America: Discussing Schooling Outcomes and Affirmative Action in Brazil ................................. 127
   Ricardo A. Madeira and Marcos A. Rangel
Part IV Europe

   Geoff Whitty and Jake Anders

9 The Achievement Gap in Science and Mathematics:
   A Turkish Perspective ............................................................. 193
   Mustafa Sami Topcu

Part V Asia

10 Achievement Gap in China ......................................................... 217
   Gaoming Zhang and Yong Zhao

11 Employing a Sociohistorical Perspective for Understanding
   the Impact of Ideology and Policy on Educational
   Achievement in the Republic of Korea .................................... 229
   Sonya N. Martin, Seung-Urn Choe, Chan-Jong Kim
   and Youngsun Kwak

12 Closing the Achievement Gap in Singapore ............................... 251
   Jason TAN

Part VI Africa

13 Equity Deferred: South African Schooling
   Two Decades into Democracy .................................................. 265
   Nick Taylor and Johan Muller

Part VII Australia

14 Securing STEM Pathways for Australian High School
   Students from Low-SES Localities: Science and
   Mathematics Academy at Flinders (SMAF) ............................ 285
   Debra Panizzon, Martin Westwell and Katrina Elliott

15 The Road to Excellence: Promoting Access and Equity to
   Close the Achievement Gap Internationally ............................ 307
   Julia V. Clark

The Contributors ............................................................................. 317
Closing the Achievement Gap from an International Perspective
Transforming STEM for Effective Education
Clark, J.V. (Ed.)
2014, XVIII, 324 p. 49 illus., Hardcover
ISBN: 978-94-007-4356-4