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, XVII, 324 p. 49 illus., Hardcover
ISBN: 978-94-007-4356-4