

Contents

Introduction	ix
Part I	
Contemporary trends in secondary school mathematics and their implications for teacher education	
Problem-solving and teacher education: the humanism twist models and muddles, <i>Stephen I. Brown</i>	3
Environmental influences, <i>Ubiratan d'Ambrosio</i>	29
Reducing differences of mathematical expectations between boys and girls, <i>Ed Jacobsen</i>	47
Algorithms, calculators, computers, <i>Barry H. Blakeley</i>	59
Algebra, analysis, geometry, <i>Douglas A. Quadling</i>	79
Statistics, <i>Lennart Råde</i>	97
Mathematics in other subjects, <i>Jagat Narain Kapur</i>	109
Part II	
Support for teachers	
Support for teachers: the mathematics department, <i>Ken Lewis</i>	125
Mathematics teachers associations, <i>János Surányi</i>	133
The in-service education of secondary school mathematics teachers <i>Fahmy I. Mikhail and Fayez M. Mina</i>	141

Part III

Two case studies

- Zimbabwe: support for tutors, utilizing video and printed modules
Gail Jaji, Levi Nyagura and Mike Robson 153
- A survey of secondary school mathematics teaching in China,
*Mei Xiangming, Tao Fangjuan, Mi Daosheng and
Jiang Ghangfeng* 159
- Biographical notes 171