

# Contents

Introduction	9
The responsibility of primary-school teachers for the mathematics component of the curriculum: implications for teacher education <i>Josefina C. Fonacier</i>	13
Contemporary trends in primary-school mathematics: implications for teacher education <i>Hilary Shuard</i>	23
The environment as a source for the elementary mathematics curriculum <i>Fidel Oteiza</i>	51
Mathematical activity in an educational context: a guideline for primary mathematics teacher training <i>Gerhard Walther</i>	69
Informatics: implications of calculators and computers for primary-school mathematics <i>David Johnson</i>	89
The origins of conceptual difficulties that young learners experience in mathematics <i>Ken Clements</i>	107
Aspects of visualization in the teaching of geometry, and reflections on a case: symmetry in primary school <i>Michele Pellerey</i>	129
Spatial ability and geometry teaching in Jamaica <i>Michael Mitchelmore</i>	135
Working story problems <i>Randall J. Souviney</i>	145
Considerations for designing assessment programmes for teacher education <i>Peggy A. House and Thomas R. Post</i>	153

Contemporary styles in pre-service teacher education for primary-school mathematics <i>Andrew Herriot</i>	175
Contemporary styles in in-service education for primary-school mathematics <i>Alan Osborne and James Schultz</i>	189
The in-service teacher-education project in Swaziland (1973-77) <i>Bryn Roberts</i>	205
A case-study of an in-service training programme for practising teachers without degrees <i>Maria do Carmo Vila and Reginaldo Maves de Souza Lima</i>	213
Support for mathematics teachers: teacher associations and radio <i>Benjamin Eshun, Klaus Galda and Peter Sanders</i>	219
Cultivation of climate through mathematics clubs <i>P. K. Srinivasan</i>	229
The IREMs' role in helping elementary-school teachers <i>Guy Brousseau</i>	235
Biographical notes	253