Introduction (H.G. STEINER)	1
I. Change and Stability in Mathematics Curricula	
I. WESTBURY Change and stability in the curriculum: an overview of the questions	12
F. VAN DER BLIJ/S. HILDING/A.I. WEINZWEIG A synthesis of national reports on changes in curricula	37
J. HIRSTEIN From Rouaymont to Bielefeld: a twenty year cross-national survey of the content of school mathematics	55
D.F. ROBITAILLE Intention, implementation, realization: case studies of the impact of curriculum reform	90
J.T. FEY The United States' NSF studies of mathematics education	108
A. MAGNIER Changes in secondary school mathematical edu- cation in France over the last thirty years	123
U. D'AMBROSIO Secondary mathematics education in Brazil	167
II. Mathematics Education and the Second IEA Mathematics Study	
K.T. TRAVERS The second international mathematics study: an overview	179
M. ROSIER The second IEA mathematics study in Australia	230
C.C. McKNIGHT Classroom processes in mathematics instruction: on characterizing the implemented curriculum	239

III. Case Studies in Mathematics Education

A. Introduction: Case studies in curriculum change (I. WESTBURY)	265
B. Geometry	
P. DAMEROW Concepts of geometry in German textbooks	281
A.G. HOWSON Geometry in Great Britain in recent years	304
E. OLDHAM Case studies in geometry education: Ireland	326
J. SZENDREI A case study in the development of geometry teaching in Hungary	347
C. Algebra	
T.J. FLETCHER Algebra in English secondary schools: changes over twenty years	354
J.J. HIRSTEIN/A.I. WEINZWEIG/J.T. FEY/K.J. TRAVERS Elementary algebra in the United States: 1955-1980	370
E. OLDHAM Case studies in algebra education: Ireland	395
T. SAWADA Elementary algebra in lower secondary school in Japan	426
HJ. VOLLRATH A case study in the development of algebra teaching in the FRG	435
D. Statistics	
V. BARNETT Teaching statistics in schools in England and Wales	444
A. af EKENSTAM Teaching statistics in Swedish schools	464

T. NEMETZ Pre-university stochastical education in Hungary	478
R.O. OHUCHE Developments in the teaching of statistics and probability since 1960: the experience of Nigeria	486
E. Reflections on the Case Studies	
A.G. HOWSON Some remarks on case studies	502
I. WESTBURY Conclusion	509
IV. Working Groups: Reports and Related Papers A. Minimal Competencies	
J.T. FEY Minimal Competencies and the mathematics curriculum (report)	523
B. Calculators	
M. SUYDAM Hand-held calculators in schools	540
B. WINKELMANN Hand-held calculators and mathematics edu- cators. Some strategic perspectives	574
C. Mathematics and Gender	
E. SCHILDKAMP-KÜNDIGER Gender and mathematics achievement (report)	597
E. SCHILDKAMP-KÜNDIGER Mathematics and gender	601
D. Vocational Education	
R. STRÄSSER Report	623
G.A. LÖRCHER Problems and trends in relating general and vocational education in grades 7-10	628

R.M. REES Stability and change in the mathematics curriculum during the last twenty years: vocational education	635
R. STRÄSSER Stability - change - reasons: mathematics in West-German textbooks for technical and vocational education	649
E. Applications	
T.J. FLETCHER A framework for the discussion of the place of applications in the teaching of mathe- matics (report)	654
T.J. FLETCHER Applications of mathematics in English secondary schools	661
F. Invention	
A.G. HOWSON/I. WESTBURY Creative activity in mathematics education: a first attempt at definition and problem- identification (report)	707
V. List of Participants/Working Group Membership	723
VI. Publication Series of the IDM	727