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QUESTIONNAIRE DATA..... 203***Appendix A: Table of Contents for Volume I of the Technical Report****Appendix B: Characteristics of the National Samples****Appendix C: Design Effects and Effective Sample Size Tables****Appendix D: Dummy Variables Constructed for Conditioning****TIMSS Acknowledgments**

The design, implementation, and analysis of the Third International Mathematics and Science Study (TIMSS) was a collaborative effort among various institutions and individuals around the world. The conduct of TIMSS was a very ambitious undertaking that required considerable resources, expertise, and the dedication of all involved. The technical documentation is a very important component of this study. The first volume in this series, the *TIMSS Technical Report, Volume I: Design and Development*, describes the design and development of the study, including the development of the achievement tests and questionnaires, the sample design and field operations procedures, and the plans for quality assurance procedures.

I am pleased to introduce the *TIMSS Technical Report, Volume II*, documenting the implementation and analysis of the assessment of students in the primary and middle school years. The publication of this volume represents a milestone for TIMSS. The pages that follow describe the activities carried out to implement this very large international study, and the analytic procedures underlying the analysis and reporting of the data. The implementation of the sample design, the calculation of sampling weights, procedures for the estimation of sampling variability, steps involved in the international data verification, the TIMSS scaling model, and the analysis of the achievement and background data, are all presented in this volume. Together with the achievement reports presenting the study results and the international database, all released to the public within the last 15 months, this volume completes the reporting of the primary and middle school assessment. The third, and final, volume in this series will describe the implementation of the TIMSS design and the analysis and reporting of results for students in the final year of secondary school.

Albert E. Beaton
TIMSS International
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Acknowledgments

TIMSS was truly a collaborative effort among hundreds of individuals around the world. Staff from the national research centers of the participating countries, the international management, advisors, and funding agencies worked closely to design and implement the most ambitious study of international comparative achievement in mathematics and science ever undertaken. The design was implemented in each country by the TIMSS national research center staff, with the cooperation and assistance of schools, and the participation of the students and teachers. This volume documents the efforts of those involved in the implementation of the very ambitious TIMSS design, and the steps undertaken to analyze and report the international results for students in the primary and middle school years (third, fourth, seventh, and eighth grades in most countries).

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