# Appendix D

# Acknowledgments

TIMSS was truly a collaborative effort among hundreds of individuals around the world. Staff from the national research centers, the international management, advisors, and funding agencies worked closely to design and implement the most ambitious study of international comparative achievement ever undertaken. TIMSS would not have been possible without the tireless efforts of all involved. Below, the individuals and organizations are acknowledged for their contributions. Given that implementing TIMSS has spanned more than seven years and involved so many people and organizations, this list may not pay heed to all who contributed throughout the life of the project. Any omission is inadvertent. TIMSS also acknowledges the students, teachers, and school principals who contributed their time and effort to the study. This report would not be possible without them.

# MANAGEMENT AND OPERATIONS

Since 1993, TIMSS has been directed by the International Study Center at Boston College in the United States. Prior to this, the study was coordinated by the International Coordinating Center at the University of British Columbia in Canada. Although the study was directed centrally by the International Study Center and its staff members implemented various parts of TIMSS, important activities also were carried out in centers around the world. The data were processed centrally by the IEA Data Processing Center in Hamburg, Germany. Statistics Canada was responsible for collecting and evaluating the sampling documentation from each country and for calculating the sampling weights. The Australian Council for Educational Research conducted the scaling of the achievement data.

# **INTERNATIONAL STUDY CENTER (1993-)**

Albert E. Beaton, International Study Director Michael O. Martin, Deputy International Study Director Ina V.S. Mullis, Co-Deputy International Study Director Eugenio J. Gonzalez, Director of Operations and Data Analysis Dana L. Kelly, Research Associate Teresa A. Smith, Research Associate Maryellen Harmon, Performance Assessment Coordinator Robert Jin, Computer Programmer Ce Shen, Computer Programmer William J. Crowley, Fiscal Administrator Thomas M. Hoffmann, Art Director Jonathan R. English, Systems Manager José Rafael Nieto, Senior Production Specialist Ann G.A. Tan. Conference Coordinator Mary C. Howard, Office Supervisor Cheryl L. Flaherty, Secretary

# INTERNATIONAL STUDY CENTER (CONTINUED)

Diane Joyce, Secretary Kathleen A. Haley, Graduate Assistant Craig D. Hoyle, Graduate Assistant

### INTERNATIONAL COORDINATING CENTER (1991-93)

David F. Robitaille, International Coordinator Robert A. Garden, Deputy International Coordinator Barry Anderson, Director of Operations Beverley Maxwell, Director of Data Management

### **STATISTICS CANADA**

Pierre Foy, Senior Methodologist Suzelle Giroux, Senior Methodologist Jean Dumais, Senior Methodologist Nancy Darcovich, Senior Methodologist Marc Joncas, Senior Methodologist Laurie Reedman, Junior Methodologist Claudio Perez, Junior Methodologist

### IEA DATA PROCESSING CENTER

Michael Bruneforth, Senior Researcher Jedidiah Harris, Research Assistant Dirk Hastedt, Senior Researcher Heiko Jungclaus, Senior Researcher Svenja Moeller, Research Assistant Knut Schwippert, Senior Researcher Jockel Wolff, Research Assistant

## AUSTRALIAN COUNCIL FOR EDUCATIONAL RESEARCH

Raymond J. Adams, Principal Research Fellow Margaret Wu, Research Fellow Nikolai Volodin, Research Fellow David Roberts, Research Officer Greg Macaskill, Research Officer

# **FUNDING AGENCIES**

Funding for the International Study Center was provided by the National Center for Education Statistics of the U.S. Department of Education, the U.S. National Science Foundation, and the International Association for the Evaluation for Educational Achievement. Eugene Owen and Lois Peak of the National Center for Education Statistics and Larry Suter of the National Science Foundation each played a crucial role in making TIMSS possible and for ensuring the quality of the study. Funding for the International Coordinating Center was provided by the Applied Research Branch of the Strategic Policy Group of the Canadian Ministry of Human Resources Development. This initial source of funding was vital to initiate the TIMSS project. Tjeerd Plomp, Chair of the IEA and of the TIMSS Steering Committee, has been a constant source of support throughout TIMSS. It should be noted that each country provided its own funding for the implementation of the study at the national level.

# NATIONAL RESEARCH COORDINATORS

The TIMSS National Research Coordinators and their staff had the enormous task of implementing the TIMSS design in their countries. This required obtaining funding for the project; participating in the development of the instruments and procedures; conducting field tests; participating in and conducting training sessions; translating the instruments and procedural manuals into the local language; selecting the sample of schools and students; working with the schools to arrange for the testing; arranging for data collection, coding, and data entry; preparing the data files for submission to the IEA Data Processing Center; contributing to the development of the international reports; and preparing national reports. The way in which the national centers operated and the resources that were available varied considerably across the TIMSS countries. In some countries, the tasks were conducted centrally, while in others, various components were subcontracted to other organizations. In some countries, resources were more than adequate, while in others, the national centers were operating with limited resources. Of course, across the life of the project, some NRCs have changed. This list attempts to include all past NRCs who served for a significant period of time as well as all the present NRCs. All of the TIMSS National Research Coordinators and their staff members are to be commended for their professionalism and their dedication in conducting all aspects of TIMSS.

#### Argentina

Carlos Mansilla Universidad del Chaco Av. Italia 350 3500 Resistencia Chaco, Argentina

#### Australia

Jan Lokan Raymond Adams \* Australian Council for Educational Research 19 Prospect Hill Private Bag 55 Camberwell, Victoria 3124 Australia

\* Past National Research Coordinator.

#### Austria

Guenter Haider Austrian IEA Research Centre Universität Salzburg Akademiestraße 26/2 A-5020 Salzburg, Austria

#### **Belgium** (Flemish)

Christiane Brusselmans-Dehairs Rijksuniversiteit Ghent Vakgroep Onderwijskunde & The Ministry of Education Henri Dunantlaan 2 B-9000 Ghent, Belgium

#### **Belgium** (French)

Georges Henry Christian Monseur Universite de Liège B32 Sart-Tilman 4000 Liège 1, Belgium

#### Bulgaria

Kiril Bankov Foundation for Research, Communication, Education and Informatics Tzarigradsko Shausse 125, Bl. 5 1113 Sofia, Bulgaria

#### Canada

Alan Taylor Applied Research & Evaluation Services University of British Columbia 2125 Main Mall Vancouver, B.C. V6T 1Z4 Canada

#### Colombia

Carlos Jairo Diaz Universidad del Valle Facultad de Ciencias Multitaller de Materiales Didacticos Ciudad Universitaria Meléndez Apartado Aereo 25360 Cali, Colombia

#### Cyprus

Constantinos Papanastasiou Department of Education University of Cyprus Kallipoleos 75 P.O. Box 537 Nicosia 133, Cyprus

#### **Czech Republic**

Jana Strakova Vladislav Tomasek Institute for Information on Education Senovazne Nam. 26 111 21 Praha 1, Czech Republic

#### Denmark

Peter Weng Peter Allerup Borge Prien\* The Danish National Institute for Educational Research 28 Hermodsgade Dk-2200 Copenhagen N, Denmark

#### England

Wendy Keys Derek Foxman\* National Foundation for Educational Research The Mere, Upton Park Slough, Berkshire SL1 2DQ England

#### France

Anne Servant Ministère de l'Education Nationale 142, rue du Bac 75007 Paris, France

Josette Le Coq\* Centre International d'Etudes Pédagogiques (CIEP) 1 Avenue Léon Journault 93211 Sèvres, France

#### Germany

Rainer Lehmann Humboldt-Universitaet zu Berlin Institut Fuer Allgemeine Erziehungswissenschaft Geschwister-Scholl-Str. 6 10099 Berlin, Germany

Juergen Baumert Max-Planck Institute for Human Development and Education Lentzeallee 94 14191 Berlin, Germany

Manfred Lehrke Universität Kiel IPN Olshausen Str. 62 24098 Kiel, Germany

#### Greece

Georgia Kontogiannopoulou-Polydorides Department of Education (Nipiagogon) University of Athens Navarinou 13A, Neochimio Athens 10680, Greece

Joseph Solomon Department of Education University of Patras Patras 26500, Greece

#### Hong Kong

Frederick Leung Nancy Law The University of Hong Kong Department of Curriculum Studies Pokfulam Road, Hong Kong

#### Hungary

Péter Vari National Institute of Public Education Centre for Evaluation Studies Dorottya U. 8, P.O. Box 120 1051 Budapest, Hungary

#### Iceland

Einar Gudmundsson Institute for Educational Research Department of Educational Testing and Measurement Surdgata 39 101 Reykjavik, Iceland

#### Indonesia

Jahja Umar Ministry of Education and Culture Examination Development Center Jalan Gunung Sahari - 4 Jakarta 10000, Indonesia

#### Ireland

Deirdre Stuart Michael Martin\* Educational Research Centre St. Patrick's College Drumcondra Dublin 9, Ireland

**Iran, Islamic Republic** Ali Reza Kiamanesh Ministry of Education Center for Educational Research Iranshahr Shomali Avenue Teheran 15875, Iran

#### Israel

Pinchas Tamir The Hebrew University Israel Science Teaching Center Jerusalem 91904, Israel

Ruth Zuzovsky Tel Aviv university School of Education Ramat Aviv PO Box 39040 Tel Aviv 69978, Israel

#### Italy

Anna Maria Caputo Ministero della Pubblica Istruzione Centro Europeo dell'Educazione Villa Falconieri 00044 Frascati, Italy

#### Japan

Masao Miyake Eizo Nagasaki National Institute for Educational Research 6-5-22 Shimomeguro Meguro-Ku, Tokyo 153, Japan

#### Korea

Jingyu Kim Hyung Im\* National Board of Educational Evaluation Evaluation Research Division Chungdam-2 Dong 15-1, Kangnam-Ku Seoul 135-102, Korea

#### Kuwait

Mansour Hussein Ministry of Education P. O. Box 7 Safat 13001, Kuwait

#### Latvia

Andrejs Geske University of Latvia Faculty of Education & Psychology Jurmalas Gatve 74/76, Rm. 204a Riga, Lv-1083, Latvia

#### Lithuania

Algirdas Zabulionis University of Vilnius Faculty of Mathematics Naugarduko 24 2006 Vilnius, Lithuania

#### Mexico

Fernando Córdova Calderón Director de Evaluación de Politicas y Sistemas Educativos Netzahualcoyotl #127 2ndo Piso Colonia Centro Mexico 1, D.F., Mexico

#### Netherlands

Wilmad Kuiper Anja Knuver Klaas Bos University of Twente Faculty of Educational Science and Technology Department of Curriculum P.O. Box 217 7500 AE Enschede, Netherlands

#### New Zealand

Megan Chamberlain Hans Wagemaker Steve May Ministry of Education Research and International Section P.O. Box 1666 45-47 Pipitea Street Wellington, New Zealand

#### Norway

Svein Lie University of Oslo SLS Postboks 1099 Blindern 0316 Oslo 3, Norway

Gard Brekke Alf Andersensv 13 3670 Notodden, Norway

#### Philippines

Milagros Ibe University of the Philippines Institute for Science and Mathematics Education Development Diliman, Quezon City Philippines

Ester Ogena Science Education Institute Department of Science and Technology Bicutan, Taquig Metro Manila 1604, Philippines

#### Portugal

Gertrudes Amaro Ministerio da Educacao Instituto de Inovação Educacional Rua Artilharia Um 105 1070 Lisboa, Portugal

#### Romania

Gabriela Noveanu Institute for Educational Sciences Evaluation and Forecasting Division Str. Stirbei Voda 37 70732-Bucharest, Romania

#### **Russian Federation**

Galina Kovalyova The Russian Academy of Education Institute of General Secondary School Ul. Pogodinskaya 8 Moscow 119905, Russian Federation

#### Scotland

Brian Semple Scottish Office, Education & Industry Department Victoria Quay Edinburgh, E86 6QQ Scotland

#### Singapore

Chan Siew Eng Research and Evaluation Branch Block A Belvedere Building Ministry of Education Kay Siang Road Singapore 248922

#### **Slovak Republic**

Maria Berova Vladimir Burjan\* SPU-National Institute for Education Pluhova 8 P.O. Box 26 830 00 Bratislava Slovak Republic

#### Slovenia

Marjan Setinc Pedagoski Institut Pri Univerzi v Ljubljana Gerbiceva 62, P.O. Box 76 61111 Ljubljana, Slovenia

#### South Africa

Derek Gray Human Sciences Research Council 134 Pretorius Street Private Bag X41 Pretoria 0001, South Africa

#### Spain

José Antonio Lopez Varona Instituto Nacional de Calidad y Evaluación C/San Fernando del Jarama No. 14 28071 Madrid, Spain

#### Sweden

Ingemar Wedman Anna Hofslagare Kjell Gisselberg\* Umeå University Department of Educational Measurement S-901 87 Umeå, Sweden

#### Switzerland

Erich Ramseier Amt Für Bildungsforschung der Erziehungsdirektion des Kantons Bern Sulgeneck Straße 70 Ch-3005 Bern, Switzerland

#### Thailand

Suwaporn Semheng Institute for the Promotion of Teaching Science and Technology 924 Sukhumvit Road Bangkok 10110, Thailand

#### United States

William Schmidt Michigan State University Department of Educational Psychology 463 Erikson Hall East Lansing, MI 48824-1034 United States

### TIMSS ADVISORY COMMITTEES

The International Study Center was supported in its work by several advisory committees. The International Steering Committee provided guidance to the International Study Director on policy issues and general direction of the study. The TIMSS Technical Advisory Committee provided guidance on issues related to design, sampling, instrument construction, analysis, and reporting, ensuring that the TIMSS methodologies and procedures were technically sound. The Subject Matter Advisory Committee ensured that current thinking in mathematics and science education were addressed by TIMSS, and was instrumental in the development of the TIMSS tests. The Free-Response Item Coding Committee developed the coding rubrics for the free-response items. The Performance Assessment Committee worked with the Performance Assessment Coordinator to develop the TIMSS performance assessment. The Quality Assurance Committee helped to develop the quality assurance program.

### INTERNATIONAL STEERING COMMITTEE

Tjeerd Plomp (Chair), the Netherlands Lars Ingelstam, Sweden Daniel Levine, United States Senta Raizen, United States David Robitaille, Canada Toshio Sawada, Japan Benny Suprapto Brotosiswojo, Indonesia William Schmidt, United States

### TECHNICAL ADVISORY COMMITTEE

Raymond Adams, Australia Pierre Foy, Canada Andreas Schleicher, Germany William Schmidt, United States Trevor Williams, United States

# SAMPLING REFEREE

Keith Rust, United States

### SUBJECT AREA COORDINATORS

Robert Garden, New Zealand (Mathematics) Graham Orpwood, Canada (Science)

# SPECIAL MATHEMATICS CONSULTANT

**Chancey Jones** 

# SUBJECT MATTER ADVISORY COMMITTEE

Svein Lie (Chair), Norway Antoine Bodin, France Peter Fensham, Australia Robert Garden, New Zealand Geoffrey Howson, England Curtis McKnight, United States Graham Orpwood, Canada Senta Raizen, United States David Robitaille, Canada Pinchas Tamir, Israel Alan Taylor, Canada Ken Travers, United States Theo Wubbels, the Netherlands

# FREE-RESPONSE ITEM CODING COMMITTEE

Svein Lie (Chair), Norway Vladimir Burjan, Slovak Republic Kjell Gisselberg, Sweden Galina Kovalyova, Russian Federation Nancy Law, Hong Kong Josette Le Coq, France Jan Lokan, Australia Curtis McKnight, United States Graham Orpwood, Canada Senta Raizen, United States Alan Taylor, Canada Peter Weng, Denmark Algirdas Zabulionis, Lithuania

### PERFORMANCE ASSESSMENT COMMITTEE

Derek Foxman, England Robert Garden, New Zealand Per Morten Kind, Norway Svein Lie, Norway Jan Lokan, Australia Graham Orpwood, Canada

# QUALITY CONTROL COMMITTEE

Jules Goodison, United States Hans Pelgrum, The Netherlands Ken Ross, Australia

### **EDITORIAL COMMITTEE**

David F. Robitaille (Chair), Canada Albert Beaton, International Study Director Paul Black, England Svein Lie, Norway Rev. Ben Nebres, Philippines Judith Torney-Purta, United States Ken Travers, United States Theo Wubbels, the Netherlands

# Art Direction and Cover design by Thomas Hoffmann

Layout and Table production by José R. Nieto