

2403

INDEX

Volume 21, 1990

ARTICLES

- BALACHEFF, NICOLAS. Towards a Problématique for Research on Mathematics Teaching. July, 258-272.
- BALL, DEBORAH LOEWENBERG. Prospective Elementary and Secondary Teachers' Understanding of Division. March, 132-144.
- BATTISTA, MICHAEL T. See Clements, Douglas H.
- BATTISTA, MICHAEL T. Spatial Visualization and Gender Differences in High School Geometry. January, 47-60.
- BEBOUT, HARRIETT C. Children's Symbolic Representation of Addition and Subtraction Word Problems. March, 123-131.
- BEHR, MERLYN. See Heller, Patricia M.
- BLUME, GLENDON. See Schoen, Harold L.
- BORKO, HILDA. See Livingston, Carol.
- BRIARS, DIANE J. See Fuson, Karen C.
- COBB, PAUL. See Nicholls, John G.
- CLEMENTS, DOUGLAS H., and BATTISTA, MICHAEL T. The Effects of Logo on Children's Conceptualizations of Angle and Polygons. November, 356-371.
- DAVIS, GARY ERNEST, and PITKETHLY, ANNE. Cognitive Aspects of Sharing. March, 145-153.
- FISCHER, FLORENCE E. A Part-Part-Whole Curriculum for Teaching Number in the Kindergarten. May, 207-215.
- FRYE, SHIRLEY M. President's Report: Maintaining Momentum as We Reach New Heights. November, 427-436.
- FUSON, KAREN C., and BRIARS, DIANE J. Using a Base-Ten Blocks Learning/Teaching Approach for First- and Second-Grade Place-Value and Multidigit Addition and Subtraction. May, 180-206.
- GOOD, THOMAS L., GROUWS, DOUGLAS A., and MASON, DeWAYNE A. Teachers' Beliefs About Small-Group Instruction in Elementary School Mathematics. January, 2-15.
- GRAEBER, ANNA O. See Tirosh, Dina.
- GROUWS, DOUGLAS A. See Good, Thomas L.
- HELLER, PATRICIA M., POST, THOMAS R., BEHR, MERLYN, and LESH, RICHARD. Qualitative and Numerical Reasoning About Fractions and Rates by Seventh- and Eighth-Grade Students. November, 388-402.
- HEMBREE, RAY. The Nature, Effects, and Relief of Mathematics Anxiety. January, 33-46.
- HOOVER, H. D. See Schoen, Harold L.
- LESH, RICHARD. See Heller, Patricia M.
- LIVINGSTON, CAROL, and BORKO, HILDA. High School Mathematics Review Lessons: Expert-Novice Distinctions. November, 372-387.
- MACK, NANCY K. Learning Fractions With Understanding: Building on Informal Knowledge. January, 16-32.
- MASON, DeWAYNE. See Good, Thomas L.
- NICHOLLS, JOHN G., COBB, PAUL, WOOD, TERRY, YACKEL, ERNA, and PATASHNICK, MICHAEL. Assessing Students' Theories of Success in Mathematics: Individual and Classroom Differences. March, 109-122.
- PATASHNICK, MICHAEL. See Nicholls, John G.
- PITKETHLY, ANNE. See Davis, Gary Ernest.
- POST, THOMAS R. See Heller, Patricia M.

- RESEARCH ADVISORY COMMITTEE OF THE NATIONAL COUNCIL OF TEACHERS OF MATHEMATICS. Mathematics Education Reform and Mathematics Education Research: Opportunities, Obstacles, and Obligations. July, 287-292.
- SCHOEN, HAROLD L., BLUME, GLENDON, AND HOOVER, H. D. Outcomes and Processes on Estimation Test Items in Different Formats. January, 61-73.
- SUYDAM, MARILYN N. Research on Mathematics Education Reported in 1989. July, 293-349.
- TARTRE, LINDSAY ANNE. Spatial Orientation Skill and Mathematical Problem Solving. May, 216-229.
- TIROSH, DINA, and GRAEBER, ANNA O. Evoking Cognitive Conflict to Explore Preservice Teachers' Thinking About Division. March, 98-108.
- WOOD, TERRY. See Nicholls, John G.
- YACKEL, ERNA. See Nicholls, John G.

BRIEF REPORTS

- CROWLEY, MARY L. Criterion-Referenced Reliability Indices Associated with the van Hiele Geometry Test. May, 238-241.
- ELLIOTT, JOHN C. Affect and Mathematics Achievement of Nontraditional College Students. March, 160-165.
- ETHINGTON, CORINNA A. Gender Differences in Mathematics: An International Perspective. January, 74-80.
- GANGULI, APARNA B. The Microcomputer as a Demonstration Tool for Instruction in Mathematics. March, 154-159.
- SENK, SHARON. See Usiskin, Zalman.
- USISKIN, ZALMAN, and SENK, SHARON. Evaluating a Test of van Hiele Levels: A Response to Crowley and Wilson. May, 242-245.
- WILSON, MARK. Measuring a van Hiele Geometry Sequence: A Reanalysis. May, 230-237

CRITIQUE

- LAWSON, MICHAEL J. The Case for Instruction in the Use of General Problem-Solving Strategies in Mathematics Teaching: A Comment on Owen and Sweller. November, 403-410.
- SWELLER, JOHN. On the Limited Evidence for the Effectiveness of Teaching General Problem-Solving Strategies. November, 411-415.

A FORUM FOR RESEARCHERS

- BAROODY, ARTHUR J. How and When Should Place-Value Concepts and Skills Be Taught? July, 281-286.
- FUSON, KAREN C. Issues in Place-Value and Multidigit Addition and Subtraction Learning and Teaching. July, 273-280.

REVIEWS

- ADAMS, VERNA M. See McLeod, Douglas B.
- KILPATRICK, JEREMY. See Neshier, Pearla.
- GARDEN, ROBERT A. See Robitaille, David F.
- MCLEOD, DOUGLAS B., and ADAMS, VERNA M. *Affect and Mathematical Problem Solving—A New Perspective* (Edward Kifer). March, 166-170.
- NCTM RESEARCH ADVISORY COMMITTEE. *Research Agenda for Mathematics Education* (Charles W. Fisher). Volumes 1-5. January, 81-89.
- NESHIER, PEARLA, and KILPATRICK, JEREMY (Eds.). *Mathematics and Cognition: A Research Synthesis by the International Group for the Psychology of Mathematics Education* (Judith T. Sowder). May, 246-250.

- NESHER, PEARLA, and KILPATRICK, JEREMY (Eds.). *Mathematics and Cognition: A Research Synthesis by the International Group for the Psychology of Mathematics Education* (Judith T. Sowder). May, 246-250.
- TRIVERS, KENNETH J., AND WESTBURY, IAN (Eds.) *The IEA Study of Mathematics I: Analysis of Mathematics Curricula* (Jeremy Kilpatrick). November, 416-424.
- ROBITAILLE, DAVID F., AND GARDEN, ROBERT A. (Eds.) *The IEA Study of Mathematics II: Contexts and Outcomes of School Mathematics* (Jeremy Kilpatrick). November, 416-424.
- WESTBURY, IAN. See Kenneth J. Travers.

REVIEWERS

- FISHER, CHARLES W. The Research Agenda Project as Prologue. January, 81-89.
- KIFER, EDWARD. Hot and Cold Responses to Good Mathematics. March, 166-170.
- KILPATRICK, JEREMY. Apples and Oranges Again. November, 416-424.
- SOWDER, JUDITH T. Constructing an International Perspective. May, 246-250.

CORRESPONDENT

- ISAACS, IAN. January, 91.

NOTES AND NOTICES

- Acknowledgment: November, 437-438.
- Editorials: (Thomas P. Carpenter) May, 178-179.
- 1990 NCTM Election Results: July, 350-352.