

DAFTAR PUSTAKA

- Abdulhak, I. (2001). "Komunikasi Pembelajaran: Pendekatan Konvergensi Dalam Peningkatan Kualitas dan Efektifitas Pembelajaran". Disampaikan pada Pidato Pengukuhan Jabatan Guru Besar Tetap Universitas Pendidikan Indonesia, Bandung.
- Al-Rasjid, H. (1994). "Analisis Jalur". Makalah pada Lokakarya Analisis Jalur Sebagai Sarana Statistik Dalam Analisis Kausal, Bandung.
- Ansari, B.I. (2002). "Strategi Kognitif Siswa Dalam Pemecahan Masalah Tiga Dimensi". *Jurnal Mimbar Pendidikan*. 11 (4), 18-26.
- Arikunto, S. (1989). *Manajemen Penelitian*. Jakarta: Departemen Pendidikan dan Kebudayaan. Dirjen Dikti, Proyek Pengembangan LPTK.
- Artzt, A.F. (1996). "Developing Problem Solving Behaviors by Assessing Communication In Cooperative Learning". In P.C Elliott, and M.J. Kenney (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. USA: NCTM.
- Baroody, A.J. (1993). *Problem Solving, Reasoning, and Communicating, K-8. Helping children think mathematically*. New York: Merrill, an imprint of Macmillan Publishing, Company.
- Bloom, B.S. *et al.* (1971). *Hand Book on Formative and Sumative Evaluation of Student Learning*. Chicago: Mc Graw Hill, Inc
- Boediono, dkk. (Eds) (2000). Standar Nasional Kemampuan Dasar SD/Mi, SLTP/MTs, SMU/MA : *Nama dan jumlah mata pelajaran sesuai kurikulum 1994*. Jakarta : Balitbang Depdiknas.
- Brooks, J.G. & Brooks, M.G. (1999). *The Case for Constructivist Classrooms*. Virginia: Association for Supervision and Curriculum Development.
- Cai, J., Lane, S. & Jakabcsin, M.S. (1996). "The Role of Open-Ended Task and Holistic Scoring Rubrics: Assessing Students' Mathematical Reasoning and Communication". In P.C. Elliott and M.J. Kenney (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. USA: NCTM.
- Cai, J., Lane, S. & Jacabcsin, M.S. (1998). "Assessing Students' Mathematical Communication". *School Science and Mathematics Journal*. 96 (5), 238-246.

- Cai, J. (2001). "Mathematical Thinking Involved in U.S. and Chinese Students' Solving of Process-Constrained and Process-Open Problems". In Basden, J. *et al.* (Eds.). *Encouraging Mathematical Thinking: Discourse Around A Rich Problem*. New York: The Math Forum's Bridging Research and Practice Group.
- Cole, P.G & Chan, K.S. (1994). *Teaching Principles and Practice* (second edition). New York: Prentice Hall.
- Corwin, B.R. (2001). A Process Approach to Mathematics: Mathematics as Communication. [Online]. Tersedia: <http://ra.terc.edu/publications/Terc-pubs/tech-infusion/prof-dev/prof-dev-conclusion.html> [13 November 2001].
- Corwin, B.R. (2002). Supporting Mathematical Talk in Classrooms. [Online]. Tersedia: <http://ra.terc.edu/publications/Terc-pubs/tech-infusion/prof-dev/prof-dev-conclusion.html> [11 Pebruari 2002].
- Dahar, R.W. (1989). *Teori-teori Belajar*. Jakarta: Erlangga
- Esty, W.W. & Teppo, A.R. (1996). "Algebraic Thinking, Language, and Word Problem". In P.C Elliott, and M.J. Kenney (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. USA: NCTM.
- Gagne, R.M (1985). *The Condition of Learning and Theory of Instruction* (Fourth Edition). New York: CBS College Publishing.
- Ginsburg, H.P., Klein, A., & Starkey, P. (1998). "The Development of Children's Mathematical Thinking: Connecting Research with Practice". In W. Damon, I.E. Sigel, & K. Anne. (Eds.). *Hand Book of Child Psychology*. New York: John Wiley & Sons
- Glynn, S.M.& Muth, K.D. (1994). "Reading and Writing to Learn Science: Achieving Scientific Literacy". *Journal of Research In Science Teaching*. 31 (8), 1057-1073.
- Gokhale, A.A. (2003). Collaborative Learning Enhances Critical Thinking. [Online]. Tersedia: <http://scholar.lib.vt.edu/ejournals/JTE/jte-v7n1/gokhale.jte-v7n1.html> [20 Pebruari 2003].
- Greenes, C. & Schulman, L. (1996). "Communication Processes in Mathematical Explorations and Investigations". In P. C. Elliott and M. J. Kenney (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. USA: NCTM.

- Hamzah, (2003). Meningkatkan Kemampuan Memecahkan Masalah Matematika Siswa Sekolah Lanjutan Tingkat Pertama Negeri di Bandung Melalui Pendekatan Pengajaran Masalah. Disertasi Doktor pada PPS UPI Bandung: tidak diterbitkan.
- Hanbury, L. (1996). "Construktivism: So What?". In Wakefield, J. & Velardi, L. (Eds.). *Celebrating Mathematics Learning*. Melbourne: The Mathematical Association of Victoria.
- Horsley, S.L. (1990). *Elementary School Science for the 90s*. Virginia: Association Supervision and Curriculum Development
- Holliday, W.G. (1992). "The Reading-Science Learning-Writing Connection: Breakthroughs, Barriers and Promise". *Journal of Research In Science Teaching*. 31 (7), 877-893.
- Huinker, D. & Laughlin, C. (1996). "Talk Your Way into Writing". In P. C. Elliott, and M. J. Kenney (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. USA: NCTM.
- Killen, R. (1998). *Effective Teaching Strategies. Lesson from Research and Practice*. (2nd edition). Sidney: Social Science Press.
- Kramarski, B. (2000). "The effects of different instructional methods on the ability to communicate mathematical reasoning". Proceedings of the 24th conference of the international group for the psychology of mathematics education, Japan.
- Lawson, M.J. & Chinnappan, M. (2000). "Knowledge connectedness in geometry problem solving". *Journal for Research in Mathematics Education*. 31 (1), 26-43.
- MacGregor, M. & Stacey, K. (1996). "Using Algebra to Solve Problem: Selecting, Symbolising, and Integrating Information". In P.C. Clarkson. (Ed.). *Technology in Mathematics Education*. Melbourne: Merga.
- Manzo, A. (2002). Higher-order Thinking Strategies for the Classroom. [Online]. Tersedia: <http://members.aol.com/MattT10574/HigherOrderLiteracy.html> [8 Oktober 2002].
- Masingila, J.O. & Wisniowska, E.P. (1996). "Developing and Assessing Mathematical Understanding in Calculus Through Writing". In P. C. Elliott, and M. J. Kenney (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. USA: NCTM.

- Mettes, C.T.W. et al. (1980). "Teaching and Learning Problem Solving In Science. A General Strategi". *International Journal of Science Education*, 57 (3), 882-885.
- Minium, E. W., King, B. M dan Bear, G. (1993). *Statistical Reasoning In Psychology And Education*. Canada: John Wiley & Sons, Inc.
- Misiti, et al. (1991). "Science Attitude Scale for Middle School Student". *International Journal of Science Education*, 75 (5), 16-23
- Mullis, I.V.S. et al. (2000). *TIMSS 1999: International mathematics report. Finding from IEA's repeat of the third international mathematics and science study at the eight grade*. Boston: The International Study Center Boston College Lynch School of Education.
- National Council of Teachers of Mathematics. (1989). *Curriculum and Evaluation Standards for School Mathematics*. Reston, VA: NCTM
- ✓ National Council of Teachers of Mathematics. (1991). *Professional Standards for Teaching Mathematics*. Reston, VA: NCTM
- Norris, S.P. & Phillips, L.M. (1994). "Interpreting Pragmatic Meaning When Reading Popular Report of Science". *Journal of Research In Science Teaching*. 31(2), 947-967
- O' Donnell, A. (1993). "Searching for Informations in Knowledge Maps and Texts". *Contemporary Educational Psychology*. 18 (3), 222-239.
- Peterson, L.P. (1987). "Teaching for Higher-Order Thinking in mathematics: The Challenge for the Nexs Decade". In D.A. Grouws, T.J. Cooney, and D. Jones. (Eds.). *Perspectives on Research on Effective Mathematics Teaching*. USA: NCTM
- Pirie, E. B. Susan. (1996). "Is Anybody Listening?" In P. C. Elliott, and M. J. Kenney (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. USA: NCTM.
- Ruseffendi, E.T. (1988). *Pengantar Kepada Membantu Guru Mengembangkan Kompetensinya Dalam Pengajaran Matematika Untuk Meningkatkan CBSA*. Bandung: Tarsito
- Ruseffendi, E.T. (1998). *Statistik Dasar Untuk Penelitian Pendidikan*. Bandung: IKIP Bandung Press.

- Ruseffendi, E.T. dan Sanusi, A. (2001). *Dasar-Dasar Penelitian Pendidikan dan Bidang Non-Eksakta Lainnya*. Semarang: IKIP Semarang Press.
- Santoso, S. (2000). *Buku Latihan SPSS Statistik Parametrik*. Jakarta: PT. Alex Media Komputindo kelompok Gramedia
- Sawada, T. (1997). "Developing Lesson Plans". In J.P. Becker, dan S. Shimida, (Eds.). *The Open-Ended Approach: A New Proposal for Teaching mathematic*. Reston, VA: NCTM.
- Schoen, H.L., Bean, D.L, & Ziebarth, S.W. (1996). "Embedding Communication throughout the Curriculum". In P.C. Elliott, dan M.J. Kenney. (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. Reston, VA: NCTM.
- Sherin, G. M. & Izsak, A. (2003). 'Exploring the use of new representations as a resource for teacher learning'. *Official Journal of the school science and mathematics Association*. 103, 18-27.
- Shield, M. (1996). "Evaluating Student Expository Writing in Mathematics". In P.C. Clarkson. (Ed.). *Technology in Mathematics Education*. Melbourne: Merga.
- Shield. M. & Swinson. K. (1996). "The Link Sheet: A communication Aid for Clarifying and Developing Mathematical Ideas and Processes". In P.C. Elliott, dan M.J. Kenney. (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. Reston, VA: NCTM.
- Silver, E.A. & Smith, M.S. (1996). "Building Discourse Communities in Mathematics Classrooms: A Worthwhile but Challenging Journey". In P.C. Elliott, dan M.J. Kenney. (Eds.). *1996 Yearbook. Communication in Mathematics, K-12 and Beyond*. Reston, VA: NCTM
- Slettenhaar, H.K. (2000). "Adapting Realistic Mathematics In The Indonesian Context". *Journal of Indonesian mathematical Society (MIHMI)*. 8(3), 599-603).
- Sudjana. (1996). *Teknik Analisis Regresi dan Korelasi bagi Para Peneliti*. Bandung:Tarsito
- Sugiyono. (2002). *Statistika Untuk Penelitian* (cetakan keempat). Bandung: Alfabeta.

- Sullivan, P. (1992a). "Open-Ended Questions, Mathematics Investigations and the Role of the Teacher". In M. Horne, dan M. Supple. (Eds.). *Mathematics: Meeting the Challenge*. Victoria: The Mathematics Association of Victoria Clivelen.
- Sullivan, P. (1992b). "Content Specific Open-Ended Questions: A Problem Solving Approach to Teaching and Learning Mathematics". In M. Horne. dan M. Supple. (Eds.). *Mathematics: Meeting the Challenge*. Victoria: The Mathematics Association of Victoria Clivelen.
- Sullivan, P., Bourke, D., & Scott, A. (1995). "Open-Ended Tasks as Stimuli for Learning Mathematics". In P.C. Clarkson. (Ed.). *Eighteenth Annual Convergence of the Mathematics Education Research Group of Australasia*. Darwin: Mathematics Education Research Group of Australasia
- Sullivan, P & Mousley, J. (1996). "Natural Communication in Mathematics Classrooms: What Does it Look Like". In P.C. Clarkson. (Ed.). *Technology in Mathematics Education*. Melbourne: Merga.
- Sumarmo, U. (1987). Kemampuan Pemahaman dan Penalaran matematika Siswa SMA Dikaitkan dengan Kemampuan Penalaran Logik Siswa dan Beberapa Unsur Proses Belajar Mengajar. Disertasi Doktor pada FPS IKIP Bandung: tidak diterbitkan.
- Sumarmo, U. (1999). *Implementasi Kurikulum 1994 pada Sekolah Dasar dan Sekolah Menengah*. Laporan Penelitian Bandung: FPMIPA IKIP Bandung.
- Sumarmo, U. (2003). "Pembelajaran Keterampilan Membaca Matematika untuk Siswa Sekolah Menengah". Makalah pada Seminar Nasional Pendidikan MIPA, Bandung.
- Susan, C., Marylin, L. & Tony, T. (1995). *Learning to Teach in the Secondary School*. London: Routledge
- Sutiarso, S. (2000). "Problem Posing: Strategi Efektif Meningkatkan Aktivitas Siswa dalam Pembelajaran Matematika". *Journal of Indonesian Mathematical Society (MIHMI)*. 8(3), 299-307.
- Szetela, W. (1993). "Facilitating Communication for Assessing Critical Thinking in Problem Solving". In Webb, N. L. and Coxford, A. F. (Eds.). *Yearbook 1993. Assessment in the Mathematics classroom*. Reston, VA: NCTM.
- Tasker, R. (1992). "Effective Teaching: What Can a Constructivist View of Learning Offer". *The Australian Science Teacher Journal*. 38, 25-34.



- Tytler, R. (1996). "Constructivism and Conceptual Change View of Science". *Majalah Pendidikan IPA: Khasanah Pengajaran IPA* IMAPIPA
- Veloo, P.K (1996). "Teaching Children to Draw Diagram in Solving Word Problems: An Exploratory Study". In P.C. Clarkson. *Technology in Mathematics Education*. Melbourne: Merga.
- Wahyudin. (1999). *Kemampuan Guru Matematika, Calon Guru Matematika, dan Siswa dalam Mata Pelajaran Matematika*. Disertasi Doktor pada PPS IKIP Bandung: tidak diterbitkan.
- Whitin, D.J. & Whitin, P. (2000). "Exploring Mathematics Through Talking and Writing". In Burke, M.J. & Curcio, F.R. (Eds.). *2000 Yearbook. Learning Mathematics For A New Century*. USA: NCTM.
- Wiederhold, C. (1997). *The Q- Matrix/Cooperative Learning & Higher-Level Thinking*. [Online]. Tersedia: <http://members.aol.com/MattT10574/HigherOrderLiteracy.html> [8 Oktober 2002].
- Wuan, Y.L. (2001). *Exploring Mathematics*. Singapore: PAN Pacific Publications (S) PTE LTD.
- Yoong, W.K. (1992). "On Becoming A Reflective Tacher: Learning With The Filipino mathematics Educators". *Journal of Science and Mathematics Education In Southeast*. 12 (2), 48-56
- Yore, L.D & Shymanky, J.A. (1991). "Reading In science Developing and Operational Conceptions to Guide Instruction". *Journal of Research In Science Teaching*. 23 (1), 29 – 36.
- Zabrucky, K. & Commander, N.E. (1993). "Reading to Understanding: The Role of Text and Reader Proficiency". *Comtemporary Educational Psychology*, 16 (10), 444-453.