

DAFTAR PUSTAKA

- Abrams, J.P. (2001). Teaching Mathematical Modeling and the Skills of Representasian. Dalam A. Cuoco dan F. Curcio (Eds.): *The Roles of Representation in School Mathematics* (269-282). Reston, VA: NCTM.
- American Mathematical Association of Two-Year Colleges. (AMATYC, 2004). *Beyond Crossroads: Implementing Mathematics Standards in the First Two years of College*. Memphis, TN.
- Aspinwall, L., Shaw, K. L., dan Presmeg, N. C. (1997). Uncontrollable Mental Imagery: Graphical Connections Between a Function and its Derivative. *Educational Studies in Mathematics*, 33, 301-317.
- Bandura, A. (1994). Self-Efficacy. Dalam V. S. Ramachaudran (Ed.), *Encyclopedia of Human Behavior*, Vol. 4. New York: Academic Press. [Online]. Tersedia: <http://www.des.emory.edu/mfp/BanEncy.html>
- _____. (1997). *Self-Efficacy: The Exercise of Control*. New York: W.H. Freeman and Company.
- _____. (1989). Human agency in social cognitive theory. *American Psychologist*, 44. [Online]. Tersedia: http://www.des.emory.edu/mfp/Bandura_1989.pdf
- Bouffard-Bouchard, T. (1989). Influence of Self-Efficacy on Performance in a Cognitive Task. *Journal of Social Psychology*, 130. [Online]. Tersedia: <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ417394>
- Brennen, B.H. (2003). Gender Issues in Tertiary Education. [Online]. Tersedia: <http://www.soencouragement.org/Gender%20Issues%20in%20Higher%20Education%20revised.pdf>
- Burn, B.; Appleby, J.; Maher, P. (1999). *Teaching Undergraduate Mathematics*. London: Imperial College Press.
- Cole, M. dan Wersch, J. (1994). *Beyond The Individual-Social Antimony In Discussions Of Piaget And Vygotsky*. [Online]. Tersedia: <http://www.massey.ac.nz/~alock/virtual/colevyg.htm>
- Cohen, D. (Ed.) (1995). *Crossroads in Mathematics: Standards for Introductory College Mathematics Before Calculus*. Memphis, TN: American Mathematical Association of Two-Year Colleges.
- Committee on the Undergraduate Program in Mathematics (CUPM, 2004). *Undergraduate Programs and Courses in the Mathematical Science: CUPM Curriculum Guide 2004*. USA: The Mathematical Association of America.



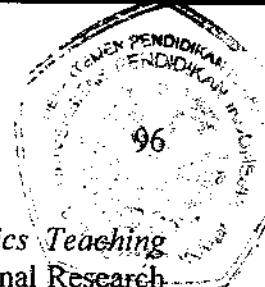
- Cottrill, J., Dubinsky, E., Nichols, D., Schwingendorf, K., Thomas, K., dan Vidakovic, D. (1996). Understanding the Limit Concept: Beginning with a Coordinated Process Schema. *Journal of Mathematical Behavior*, 15(2).
- Coulombe, W.N. dan Berenson, S.B. (2001). Representation of Pattern dan Functions. Dalam A. Cuoco dan F. Curcio (Eds.), *The Roles of Representation in School Mathematics*. Reston, VA: NCTM.
- Dennis, D. dan Confrey, J. (1996). The Creation of Continuous Exponents: A Study of the Methods and Epistemology of John Wallis. Dalam J. Kaput, A.H. Schoenfeld, E. Dubinsky (Eds.): *Research in Collegiate Mathematics Education II*. Providence, Rhode Island: American Mathematical Society.
- Doll, W.E., Jr (1993). *A Post-modernism Perspective on Curriculum*. New York: Teachers College Press.
- Dorier, J. (2004). *An Introduction to Mathematical Modelling: An Experiment with Students in Economics*. Fourth Congress of the European Society for Research in Mathematics Education. [Online]. Tersedia: <http://cerme4.crm.es/Papers%20definitius/13/dorier.pdf>
- Dougiamas, M. (1998). *A Journey into Constructivism*. Tidak dipublikasikan. Curtin University, Perth, Australia Barat. [Online]. Tersedia: <http://dougiamas.com/writing/constructivism.html>
- Dreyfus, T. dan Eisenberg, T. (1990). On Difficulties with Diagrams: Theoretical Issues. *Proceedings of the 14th International Conference of the International Group for the Psychology of Mathematics Education*, Mexico.
- Dubinsky, E. (1994). A Theory and Practice of Learning College Mathematics. Dalam A.H. Schoenfeld. *Mathematical Thinking and Problem Solving*. Hillsdale, New Jersey: Lawrence Erlbaum Associates, Publishers.
- Duch, B.J. (2001a). Models for Problem-Based Instruction in Undergraduate Courses. Dalam B.J. Duch, S.E. Groh, dan D.E. Allen (Eds): *The Power of Problem-Based Learning*. Virginia, Amerika: Stylus Publishing.
- _____. (2001b). Writing Problems for Deeper Understanding. Dalam B.J. Duch, S.E. Groh, dan D.E. Allen (Eds): *The Power of Problem-Based Learning*. Virginia, Amerika: Stylus Publishing.
- Duch, B.J., Groh, S.E., dan Allen, D.E. (2001). Why Problem-Based Learning: A Case Study of Institutional Change in Undergraduate Education. Dalam B.J. Duch, S.E. Groh, dan D.E. Allen (Eds): *The Power of Problem-Based Learning*. Virginia, Amerika: Stylus Publishing.

- Dufour-Janvier, B., Bednarz, M., dan Belanger, M. (1987). Pedagogical Considerations Concerning the Problem of Representations. Dalam C. Janvier (Ed.): *Problems of Representations in the Teaching and Learning of Mathematics*. Hillsdale, New Jersey: Lawrence-Erlbaum Associates, Publishers.
- Erickson, D.K. (1999). A Problem-Based Approach to Mathematics Instruction. *The Mathematics Teacher*. Reston, VA: NCTM.
- Ferrini-Mundy, J. dan Graham, K. G. (1991). An Overview of the Calculus Curriculum Reform Effort: Issues for Learning, Teaching, and Curriculum Development. *The American Mathematical Monthly*, 98(7), 627-635. [Online]. Tersedia: <http://portal.acm.org/citation.cfm?id=115400>
- Geoghegan N. (2005). SEARCHING for Control in a Post-modern Mathematica classroom. *The Mathematics Education into the 21st Century Project*, Universiti Teknologi Malaysia. [Online]. Tersedia: http://math.unipa.it/~grim/21_project/21_malasya_2005
- Gergen, K. J. (1995). Social Construction and Educational Process. In J. Gale (Ed.), *Constructivism and Education*. Broadway, Hillsdale: Lawrence Erlbaum Associates, Publishers.
- Goldin, G. A. dan Kaput, J.J. (1994). A Joint Perspective on the Idea of Representation in Learning and Doing Mathematics. Dalam L. Steffe dan P. Nesher. (Eds.): *Theories of Mathematical Learning*. Mahwah (New Jersey): Lawrence Erlbaum Associates.
- Goldin, G. A. dan Shteingold, N. (2001). Systems of Representations and the Development of Mathematical Concepts. Dalam A. Cuoco & F. Curcio (Eds.): *The Roles of Representation in School Mathematics* (1-23). Reston, VA: NCTM.
- Greer, B. dan Harel, G. (1998). The Role of Isomorphisms in Mathematical Cognition. *Journal of Mathematical Behavior*, 1, 5-24.
- Hackett, G. (1985). The Role of Mathematics Self-Efficacy in the Choice of Math-related Majors of College Women and Men: A Path Analysis. *Journal of Counseling Psychology*, 32.
- Hackett, G. dan Betz, N. E. (1989). An Exploration of the Mathematics Self-Efficacy/Mathematics Performance Correspondence. *Journal for Research in Mathematics Education*, 20.

- Hiebert, J. dan Lefevre, P. (1986). Conceptual and Procedural Knowledge in Mathematics: An Introductory Analysis. Dalam J. Hiebert (Ed.): *Conceptual and procedural knowledge: The case of mathematics*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Hong, Y. Y., Thomas, M., dan Kwon, O. (2000). Understanding Linear Algebraic Equations via Super-calculator Representations. Dalam T. Nakahara dan M. Koyama (Eds.): *Proceedings of the 24th Annual Conference of the International Group for the Psychology of Mathematics Education* (Vol.3, pp.57-64). Hiroshima, Japan: Programme Committee.
- Hung, D. (2002). Situated Cognition and Problem-Based Learning: Implications for Learning and Instruction with Technology. *Journal of Interactive Learning Research* (2002) 13(4). [Online]. Tersedia: <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ664833>
- Janvier, C. (1987). Representation and Understanding: The Notion of Functions as an Example. Dalam C. Janvier (ed.): *Problems of Representation in the Teaching and Learning of Mathematics* (67-72). Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Kendal, M. (2001). *Teaching and Learning Introductory Differential Calculus with a Computer Algebra System*. Dissertation: Tidak dipublikasikan. [Online]. Tersedia: http://eprints.unimelb.edu.au/archive/00001525/01/Margaret_Kendall.pdf
- Kennedy, D. (2000). *AP Calculus for a New Century*. [Online]. Tersedia: http://www.collegeboard.org/ap/calculus/new_century/index.html.
- Kerslake, D. (1977). The Understanding of Graphs. *Mathematics in School*, 6. [Online]. Tersedia: <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ157575>
- Kieran, C. (2006). Research on the Learning and Teaching Algebra. Dalam A. Gutierrez dan P. Boero (eds). (2006). *Handbook of Research on the Psychology of Mathematics Education: Past, Present and Future*. Rotterdam: Sense Publishers.
- Larson, L. M., Piersel, W. C., Imao, A. K., dan Allen, S. J. (1990). Significant Predictors of Problem-solving Appraisal. *Journal of Counseling Psychology*, 37. [Online]. Tersedia: <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ422412>
- Lent, R. W., Lopez, F. G., dan Bieschke, K. J. (1993). Predicting Mathematics-Related Choice and Success Behaviors: Test of an Expanded Social Cognitive model. *Journal of Vocational Behavior*, 42. [Online]. Tersedia: <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ458806>

- _____. (1991). Mathematics Self-Efficacy: Sources and Relation to Science-based Career Choice. *Journal of Counseling Psychology*, 38.
- Lesh, R. dan Doerr, H. M. (2003). *Beyond Constructivism: Models and Modeling Perspectives on Mathematics Problem Solving, Learning, and Teaching*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Lesh, R., Post, T., dan Behr, M. (1987). Representations and Translations among Representations in Mathematics Learning and Problem Solving. Dalam C. Janvier (ed.): *Problems of Representation in the Teaching and Learning of Mathematics*. Hillsdale, N.J.: Lawrence Erlbaum Associates.
- Lesser, L.M. dan Tchoshanov, M.A. (2005). The Effect of Representation and Representational Sequence on Students' Understanding. Dalam Lloyd, G. M., Wilson, M., Wilkins, J. L. M., dan Behm, S. L. (Eds.). *Proceedings of the 27th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*.
- Luitel, B.C. (2002). *Representation of Mathematical Learning: A Short Discourse*. [Online]. Tersedia: <http://au.geocities.com/bcluitel/Representation-revisited>
- Miller, J.B. (2000). *The quest for the constructivist statistics classroom: Viewing practice through constructivist theory*. Disertasi. Tidak dipublikasikan. The Ohio State University, Columbus.
- Mina, F.M. (2000). *Theorizing for Non-theoretical Approaches to Mathematics Education*. [Online]. Tersedia: <http://math.unipa.it/~grim/Jminafima.PDF>
- Minium, E.W.; King, B.M.; Bear, G. (1993). *Statistical Reasoning in Psychology and Education*. New York: John Wiley & Sons.
- Moslehian, M.S. (2000). *A Glance at Postmodern Pedagogy of Mathematics*. Departemen Matematika, Universitas Ferdowsi University, P.O.Box 1159, 91775 Mashhad, Iran. [Online]. Tersedia: <http://www.cochise.edu/information/library/documents/A%20GLANCE%20AT%20POSTMODERN%20PEDAGOGY%20OF%20MATHEMATICS.HTM>
- Neyland, J. (1996). *Teachers' Knowledge: The Starting Point for a Critical Analysis of Mathematics Teaching*. Philosophy of Mathematics Education Newsletter 9. [Online]. Tersedia: <http://www.people.ex.ac.uk/PERnest/pome/pompart4.htm>
- Niss, M. (2001). Issues and Problems of Research on the Teaching and Learning of Applications and Modelling. Dalam J.F. Matos, et al. *Modelling and Mathematics Education: ICTMA-9*. Chichester: Ellis Horwood.

- _____. (2003). *Mathematical Competencies and the Learning of Mathematics: The Danish KOM Project*. [Online]. Tersedia: http://www7.nationalacademies.org/mseb/Mathematical-Kompetencies_and_the_Learning_of_Mathematics.pdf
- O'Callaghan, B. R. (1998). Computer-intensive Algebra and Students' Conceptual Knowledge of Functions. *Journal for Research in Mathematics Education*, 29(1), 21-40.
- Ozgun-Koca, S.A. (1989). *Students' Use of Representation in Mathematics Education*. Disajikan dalam Annual Meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education. Raleigh, NC.
- Pajares, F. (2002). *Overview of Social Cognitive Theory and of Self-Efficacy*. [Online]. Tersedia: <http://www.emory.edu/EDUCATION/mfp/eff.html>
- Pajares, F., dan Miller, M. D. (1995). Mathematics Self-Efficacy and Mathematics Outcomes: The Need for Specificity of Assessment. *Journal of Counseling Psychology*, 42.
- _____. (1994). The Role of Self-Efficacy and Self-Concept Beliefs in Mathematical Problem-solving: A Path Analysis. *Journal of Educational Psychology*, 86.
- Poppe, P. E. (1993). *Representations of Function and the Roles of the Variable*. (Doctoral dissertation, Georgia State University. Dissertation Abstracts International, 54 (12), Z4383.
- Porzio, D.T. (1994). *The Effects of Differing Technological Approaches of Calculus on Students' Use and Understanding of Multiple Representations When Solving Problems*. Disertasi The Ohio State University, USA: tidak diterbitkan. [Online]. Tersedia: <http://www.citejournal.org/vol5/iss1/mathematics/article1.cfm>
- Roh, K.H. (2003). *Problem-based Learning in Mathematics*. Clearinghouse for Science, Mathematics, and Environmental Education. [Online]. Tersedia: <http://www.ericdigest.org/2004-3/math.html>
- Rif'at, M. (2001). *Pengaruh Pembelajaran Pola-pola Visual dalam Rangka Meningkatkan Kemampuan Menyelesaikan Masalah-masalah Matematika*. Disertasi PPS IKIP, Bandung: tidak diterbitkan.
- Ruseffendi, E.T. (1991). *Penilaian Pendidikan dan Hasil Belajar Siswa Khususnya dalam Pengajaran Matematika*. Diktat.



- Ryken, A.E. (2006). *Reflect, Renew, Reinvent: Making Mathematics Teaching Visible Through Multiple Representations*. American Educational Research Association (AERA) Annual Meeting 2006. [Online]. Tersedia: <http://www2.ups.edu/faculty/aryken/representations.pdf>
- Santos, A. G. D. dan Thomas, M. (2003). Representational Ability and Understanding of Derivative. Dalam N. A. Pateman, B. J. Dougherty, dan J. Zilliox (Eds.), *Proceedings of the 27th Conference of the International Group for the Psychology of Mathematics Education*, Vol. 2. Honolulu, Hawai'i: University of Hawai'i.
- Savery, J.R. dan Duffy, T.M. (1996). PBL: An Instructional Model and is Constructivist Framework. Dalam *Constructivist Learning Environments: Case Studies in Instructional Design*. B.G. Wilson (ed). Englwood Cliffs, NJ: Educational Technology Publications.
- Schunk, D. H. (1987). Peer Models and Children's Behavioral Change. *Review of Educational Research*, 57. [Onlie]. Tersedia: <http://www.eric.ed.gov/ERICWebPortal/recordDetail?accno=EJ369709>
- _____. (1981). Modeling and Attributional Effects on Children's Achievement: A Self-Efficacy Analysis. *Journal of Educational Psychology*, 73. [Online]. Tersedia: http://www.eric.ed.gov/sitemap/html_0900000b800ae17e.html
- Schoenfeld, A. H. (1992). Learning to Think Mathematically: Problem Solving, Metacognition, and Sense-making in Mathematics. In D. Grouws (Ed.), *Handbook of research on mathematics teaching and learning* (pp. 334-370). New York: MacMillan.
- Sfard, A. (1992). Operational Origins of Mathematical Objects and the Quandary of Reification-The Case of Function. Dalam E. Dubinsky dan G. Harel (Ed.), *The Concept of Function: Aspects of Epistemology and Pedagogy*, USA: Mathematical Association of America.
- Shell, D. F., Colvin, C., dan Bruning, R. H. (1995). Self-Efficacy, Attributions, and Outcome Expectancy Mechanisms in Reading and Writing Achievement: Grade-level and Achievement-level Differences. *Journal of Educational Psychology*, 87. [Online]. Tersedia: <http://www.des.emory.edu/mfp/effchapter.html>
- Sierpinska, A. (1992). On Understanding the Notion of Function. Dalam E. Dubinsky dan G. Harel (Ed.): *The Concept of Function: Aspects of Epistemology and Pedagogy* (25-58). USA: Mathematical Association of America.
- Skemp, R.R. (1976). Relational Understanding and Instrumental Understanding. *Mathematics Teaching*, 77.

- Snedecor, G.W. dan Cochran, A.G. (1980). *Statistical Methods*, 7th ed. Ames: The Iowa State University Press.
- Sriraman, B. (2004). *Conceptualizing the Notion of Model Eliciting*. Fourth Congress of the European Society for Research in Mathematics Education. [Online]. Tersedia: <http://rlab.cs.utep.edu/stem-ed/papers/sriraman.pdf>
- Stylianou, D. dan Pitta-Pantazi, D. (2002). Visualization and High Achievement in Mathematics: A Critical Look at Successful Visualization Strategies. Dalam F. Hitt (Ed.): *Representations and Mathematics Visualization*. Mexico: Cinvestav-IPN.
- Subino. (1987). *Konstruksi dan Analisis Tes*. Jakarta: Departemen Pendidikan dan Kebudayaan.
- Tall, D.O. (1995). Cognitive Growth in Elementary and Advanced Mathematical Thinking. *Conference of the International Group for the Psychology of Learning Mathematics, Recife, Brazil, July 1995, Vol I*.
- _____. (1991). The Psychology of Advanced Mathematical Thinking. Dalam D.O. Tall, (ed), *Advanced Mathematical Thinking*. The Netherlands: Kluwer Academic Publishers.
- Thomas, M. dan Hong, Y. Y. (2001). Representations as Conceptual Tools: Process and Structural Perspectives. Dalam M. van den Heuvel-Panhuizen (Ed.), *Proceedings of the 25th Conference of the International Group for the Psychology of Mathematics Education*, Vol. 4. Utrecht, The Netherlands: Utrecht University.
- UNESCO. (2006). *Regional Secretariat for Gender Equity in Science and Technology*. [Online]. Tersedia: <http://gab.wigsat.org/resgest.pdf>
- Wilensky, U.J. (1993). *Connected Mathematics-Building Concrete Relationship with Mathematical Knowledge*. Disertasi, Massachusetts Institute of Technology, Amerika: tidak dipublikasikan. [Online]. Tersedia: <http://ccl.northwestern.edu/papers/download/Wilensky-thesis.pdf>
- Venkatachary, R. (2004). *Keeping the Promise of Rigour and Content in PBM Curriculum Design Issues in the One Day One Problem Pedagogy*. Singapore: The Republic Polytechnic. [Online]. Tersedia: http://discovery.rp.edu.sg/home/ced/research/papers/rigour_and_content_in_PBM.pdf
- von Glaserfeld, E. (1995) *Radical Constructivism: A Way of Knowing and Learning*. London: Falmer Press.

- Vygotsky, L.S. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press.
- Ward, J.D. dan Lee, C.L. (2002). A Review of Problem-Based Learning. *Journal of Family and Consumer Sciences Education*, Vol. 20, no.1.
- Watson, J.M. (2006). An Exploration of Gender Differences in Tertiary Mathematics. [Online]. Tersedia: http://www.eric.ed.gov/ERICWebPortal/custom/portlets/recordDetails/detailmini.jsp?_nfpb=true&_&ERICExtSearch_SearchValue_0=EJ464644&ERICExtSearch_SearchType_0=eric_accno&accno=EJ464644
- Wood, T.; Cobb, P.; Yackel, E. (1995). Reflections on Learning and Teaching Mathematics in Elementary School. Dalam L. P. Steffe dan J. Gale (Eds) *Constructivism in Education*. Hillsdale, New Jersey: Lawrence Erlbaum.
- Yerushalmy, M. (1997). Designing Representations: Reasoning about Functions of Two Variables. *Journal for Research in Mathematics Education*, 27(4), 431-466.
- Zachariades, T., Christou, C., dan Papageorgiou, E. (2002). *The Difficulties and Reasoning of Undergraduate Mathematics Students in the Identification of Functions*. University of Athens.
- Zeldin, A.L. (2000). *Sources and Effects of the Self-Efficacy Beliefs of Men with Careers in Mathematics, Science, and Technology*. Emory University. Disertasi: tidak dipublikasikan. [Online].
Tersedia: <http://www.des.emory.edu/mfpl/ZeldinDissertation2000.PDF>